

The Influence of Social Norms on Attitudes Toward Help Seeking Behavior of College  
Undergraduates at a Major Midwestern University

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Doctor of Philosophy

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This dissertation titled  
The Influence of Social Norms on Attitudes Toward Help Seeking Behavior of College  
Undergraduates at a Major Midwestern University

by

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### **Abstract**

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The Influence of Social Norms on Attitudes Toward Help Seeking Behavior of College Undergraduates at a Major Midwestern University

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Research has shown that college student wellness is a priority among administrators and mental health professionals on college campuses. There is mounting concern surrounding the emerging mental health issues that plague college age individuals. Researchers have made effort to provide explanation for the gap in mental health treatment as many people with mental health issues do not receive treatment, specifically those in the college population. Many barriers to receiving services have been identified, but none have been considered to be as important as stigma. The perception of stigmatization of individuals who suffer from psychological problems deters them from seeking services. Research shows that peer attitudes and beliefs have tremendous influence over individual decision making. The issue of mental health is no exception. Social norms theory asserts that individuals often misperceive the attitudes and beliefs of their peers allowing these misperceptions to dictate individuals' behaviors and thought process. In order to further investigate the impact of social norms on attitudes toward mental health help seeking among college students, the current study administered the Inventory of Attitudes Toward Seeking Mental Health Services to Ohio University college students; one time asking them to answer questions about themselves

and one time asking them to answer based on their perception of their peers attitudes. The results were analyzed using repeated-measures ANOVA and revealed that college students perceived their peers to feel less favorably about mental health help seeking than they do. Investigation of the demographics showed that gender did impact that way that students answered questions, however, still students believed that they had a more favorable view of mental health help seeking than their peers. Data from this research serves to advance the application of social norms theory and shows the efficacy of applying this theory to the issue of mental health help seeking.

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To my grandparent and family who have provided me with the most wonderful foundation and sense of family, I am so grateful to have them in my life. I feel so blessed

to be surrounded by the love and support of a successful family who loves unconditionally and is always there to provide constant support for me.

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## Dedication

*To my son Ty the reason for my everything, my husband, Hunter, who challenges me to be better, and my family, who inspires me and gives me strength.*



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## Chapter 1: Introduction

The following introduction provides a statement of the problem, the purpose of the study, the need for the study, research questions, null hypothesis, the significance of the study, an explanation of the participants and that data set used in the study, the limitations and delimitations of the study, and definition of terms included in the study.

### Statement of the Problem

In recent years, college campuses have taken a renewed approach toward encouraging wellness among their student body (Myers & Mobley, 2004). According to Healthy Campus 2010, promotion of healthy behaviors has become a major priority for college campuses (American College Health Association, 2004). The World Health Organization (WHO) has developed a widely used definition of wellness that includes “physical, mental, and social well-being” (WHO, 1958, p. 1). Literature surrounding wellness and universities discuss strategies to implement programming that promotes holistic health in undergraduates in alignment with the World Health Organization’s definition of wellness (LaFountaine, Nelson, & Parsons, 2006). With the inclusion of mental health in this focus on wellness behaviors it is necessary to gain an increased understanding of college students’ attitudes towards help seeking in order to develop programming and activities to enhance comprehensive wellness in undergraduates. Colleges have a distinct opportunity to address mental health, as it is one of the most significant health concerns among adolescents and young adults (Hunt & Eisenberg, 2010).

Mental health issues in college students have been an emerging concern among administrators, faculty, and mental health service providers for a number of years (Lee, Michelson, Olson, Odes, Locke, 2009). Gallagher (2011) reported that 84.6% of college counseling centers have had an increase in severe psychological problems among students in the last 5 years. 80.8% of college counseling center directors reported an increase in individual counseling sessions among the student body (Gallagher, 2011). The American College Health Association National College Health Assessment (2011) yielded important insights into mental health issues among college students including: 31.3% of college students reported suffering from depression within the last 12 months, 50.6% of college students reported suffering from feelings of anxiety, and 45.1% of college students reported feeling hopeless within the last 12 months. Students in counseling centers present with complex mental health issues, such as anxiety, depression, suicidal ideation, and substance abuse along with more typical college student problems, such as stress and relationship issues (Benton, Robertson, Tseng, Newton, & Benton, 2003). Campus mental health professionals are being challenged to provide students with services that include severe mental health issues and problems with adjustment as students have more critical needs than they did in the past decade (Benton et al., 2003). According to the National Survey of Counseling Center Directors (Gallagher, 2010) 91% of directors report a recent trend toward greater number of students with severe psychological problems. As the severity and complexity of college student problems continues to rise, the need to work with trained professionals becomes even more critical to their health and wellness (Benson et al., 2003; Lee et al., 2009),

however less than one third of individuals who experience psychological distress seek help from mental health professionals (Vogel, Wester, & Larson, 2007). Developing an understanding for student attitudes toward help-seeking is critical to successful intervention.

Despite literature that supports the quality and effectiveness of mental health Counseling and related services, many people whom may benefit from these services do not obtain them (Corrigan, 2004). Many people view seeking professional psychological help as a last resort after attempts to mediate problems on their own or with help from their support system have failed (Vogel et al., 2007b). Blanco, Okuda, Wright, Hasin, Grant, Liu, and Olfson, (2008) found that most college students with significant psychiatric disorders and mental health issues did not seek treatment suggesting substantial unmet needs exist in this population. Andrews, Issakidis, & Carter (2001) reported that less than one third of individuals who experience psychological distress seek help from a mental health professionals. Consistent with the aforementioned statement, 228 college counseling centers represent 2.3 million students who are eligible for counseling services at their institutions, but 165,000 of these students (10.6%) sought counseling during the previous 12 months (Gallagher, 2011). Research suggests that adolescent and young adult psychiatric problems continue into adulthood creating even more significant public health issues related to mental health (Hunt & Eisenberg, 2010). It is important to discern the reason for avoidance of mental health services in order to successfully intervene to encourage health-promoting behaviors among university students.



Peers represent an important reference group for college students (Turrisi et al., 2009). Research implicates that students will often base their attitudes and behaviors on their perception of their social groups' attitudes and behaviors (LaBrie, Hummer, Hutching, & Neighbors, 2009). The most often cited reason for individual's avoidance of mental health services is the stigma associated with mental illness and counseling services (Vogel et al., 2006). Link and Phelan (2001) stated that the literature surrounding the definition of stigma has been criticized for being too vague in defining the concept of stigma. Social scientists have since offered many definitions of the concept of stigma. "Stigma has been defined as a mark or flaw resulting from a personal or physical characteristic viewed as socially unacceptable" (Vogel, Wade, & Hackler, 2007a, p. 40). More specifically, stigmatization in mental health has been conceptualized as the process of objectifying and dehumanizing a person who is characterized as having a mental illness (Masuda, Price, Anderson, Schmertz, & Calamaras, 2009). The existence of stigma surrounding mental illness and mental health services is clear with individuals reporting stigma toward counseling clients as well as those with serious mental illness (Vogel et al., 2007a). Therefore, people may decline to seek counseling and mental health treatment even when they are experiencing severe psychological symptoms or emotional pain (Vogel et al., 2006). Some of the reasoning associated with avoiding psychological treatment and mental health services is a result of perceived social norms and public stigma that influence attitudes and behaviors toward professional psychological help (Vogel et al., 2006). Increased insight into the actual attitudes of college students toward help seeking and their perception of peer attitudes toward help

seeking can help to breakdown harmful barriers that are causing mental health disparities on college campuses (Hunt & Eisenberg, 2010). Those who pursue counseling services must be able to view the services as effective and believe that counselors have the potential to offer constructive support to help navigate difficult life circumstances and cope with mental illness (Lopez, Melendez, Sauer, Berger, & Wyssmann, 1998). Through use of social norms it may be possible for researchers to gain an understanding of how group norms are impacting help seeking behaviors of the college population.

Group norms are central to the attitudes, behaviors, and expectations of individuals who identify with social groups (Perkins, 2002). Norms represent powerful agents of control within reference groups (Perkins). Social norms are a fundamental part of understanding social order and human behavior reflected in the dominant or most typical attitudes, expectations, and behaviors that characterize groups through perpetuation of actions (Perkins). The impact of social norms on college students is well represented in the literature with numerous studies documenting the impact of perceived social norms on the attitudes and behavior of university students (LaBrie et al., 2009). While the body of knowledge surrounding the social norms approach continues to grow (Perkins, 2003; 2002; 1999; Perkins & Craig, 2008; 2003; Perkins, Craig, & Perkins, 2011; Turrisi et al. 2009; Turner, Perkins, & Bauerle, 2008), much of the research targets alcohol related problem behavior in college students (Berkowitz & Perkins, 1986; Perkins, 2002; Perkins, 2003; Sher, Bartholow, & Nada, 2001) leaving much work to be done surrounding the effectiveness of these strategies in working with perception of other health related behavior including their perception of professional psychological services.

With several research and prevention experts reporting significant success in reducing alcohol and substance use in college populations through use of social norms interventions many questions have arisen about expanding use of the theory to other kinds of unhealthy behaviors (Perkins, 1999; Perkins, 2003). In support of this expansion, many studies have explored the use of social norms and other social issues. Perkins (2002) reported results of social norms campaigns that were successful in producing cessation of smoking behaviors in adolescents and Berkowitz (2010) using social norms strategies to successfully intervene in issues of violence and abuse. Interventions for risk taking behaviors using the social norms approach have been widely applied to college student populations in effort to combat problematic drinking patterns, but have not been employed to the same degree with other health promoting interventions (Berkowitz). The application of social norms theory to problematic drinking can be attributed to the widespread success of the theory when used in this capacity (Perkins, 2003). The focus of social norms research on problematic drinking in collegiate populations can be attributed to the success of using social norms strategies in this way, but this focus does not indicate questionable efficacy in application to other health promoting strategies (Perkins, 2003). Studies using the social norms approach in other populations and with other issues, while limited, have been implemented with high levels of success in changing problem behaviors through correcting misperceptions (Berkowitz). Misperceptions have been documented in over seventy-five studies published in refereed journals with social norms strategies producing efficacious results in correcting the misperceptions driving problematic behavior (Berkowitz). Research in

the social norms realm consistently report that norms surrounding risk-taking behaviors and unhealthy behaviors are steeped in misperception that proves detrimental to young people. Social norms theory maintains that correcting misperceptions results in reduction and in some cases cessation of problem behaviors (Berkowitz, 2010; Perkins, 2003; 2002; 1999; Perkins & Craig, 2008; 2003; Perkins, Craig, & Perkins, 2011).

In recent years the social norms approach to preventing unhealthy behaviors has gained popularity among researchers, social workers, and counselors who work with adolescent and young adult population as traditional strategies fail to reduce the prevalence of unhealthy behavior among youth (Berkowitz, 2010; Perkins, 2003; 2002; 1999; Perkins & Craig, 2008; 2003; Perkins, Craig, & Perkins, 2011). Social norms theory represents a sharp departure from traditional theories that fail to discern if peer influence on behavior is determined by what peers actually think and do or what individuals believe peers think and do (Perkins, 2003). The efficacy of interventions for problem behavior using the social norms approach is supported by a growing body of research and government agencies, state agencies, and non-profit agencies are now funding projects using the social norms approach. Social norms interventions have been implemented by the Center for Substance Abuse and Prevention, the National Institute on Alcoholism and Alcohol Abuse, and many from the US Department of Education. Adolescents and young adults general inclination toward unhealthy, risk taking behavior coupled with greater vulnerability to peer influence result in a greater impact of peer perception and behavior in decision making (Gardner and Steinberg, 2005). Hence, this

population is a viable candidate for intervention strategies using the social norms theory as a framework.

Steinberg (2007) suggests that adolescents and young adults engage in more risk taking behavior than do children and adults making prevention efforts for this population of greater importance. Statistics on automobile crashes, substance use, irresponsible sexual behavior, and crime support the notion that adolescents and college-age individuals take more risks than children and adults do (Steinberg, 2007). Adolescents engage in many risky behaviors, and these behaviors have significant potential for adverse outcomes and critical consequences (Klein et al., 1993; Steinberg, 2007). Results of these studies represent a need for further research and investigation concerning attitudes toward healthy behaviors and prevention strategies focused on changing the perception and prevalence of unhealthy behaviors among this population (Berkowitz, 2010). The lack of concern for wellness and healthy behavior patterns in adolescents can partially be attributed to the consistent presence and frequent interaction with peers emphasizing the role of peer influence on attitudes and behavior (Gardner and Steinberg, 2005; Steinberg, 2007). Greater understanding of adolescents and young adults attitudes toward health promoting behaviors such as mental health counseling can help to ensure that efforts for social norms programming in the form of social norms campaigns and social norms based interventions are effective and contain normative feedback based on actual group norms and behaviors that are credible.

Pervasive problems surrounding overestimation of peer participation in unhealthy behaviors and lack of concern for mental health and wellness has proven to be a predictor

of adolescent and young adult rejection of health promoting behaviors and services aimed at encouraging wellness. Less than 40% of individuals with a mental health concern seek any type of professional help while less than 11% seek help from mental health professionals (Vogel, Wade, & Haake, 2006). The most cited reason for this avoidance of treatment is the perception of stigma that is associated with mental illness and mental health professionals (Vogel et al., 2006). An extensive body of literature has documented the importance of peer influences and normative beliefs on healthy behaviors (Perkins, 2003; Berkowitz, 2004). LaBrie, Hummer, Hutchings, and Neighbors (2009) reported that peer influence is one of the biggest determinants of peer behavior and beliefs. Swanson, Zegers, Zwaska (2007) indicated that peer groups serve as a predictor that strongly influence the behavior and attitudes of undergraduate students during their collegiate experience. Research on social norms theory proposes that peer influences are based on what we think other believe and do than on their real beliefs and actions. Berkowitz (2004) suggested that the “gap between “perceived” and “actual” norms is referred to as a “misperception” and its effect on behavior and perception provides the basis for the social norms approach” (p.5). Berkowitz (2004) asserts that a “misperception occurs when there is an overestimate or underestimation of the prevalence of attitudes and behaviors in social group or individuals” (p.5). Social norms theory asserts that by correcting misperceptions that overestimate the prevalence of a particular behavior, problematic or dangerous behaviors will decline” (Berkowitz, 2004, p.5). The correcting of misperceptions through providing intervention strategies that

focus on normative feedback is considered a fundamental principal of social norms interventions.

Misperceptions can occur in a variety of ways that influence behavior and perception of risky and non-risky behaviors. Berkowitz (2004) explains three types of misperceptions that impact social norms. “Pluralistic ignorance is described as majority belief that their behavior and beliefs are different from that of their peers when in fact they are not” (Berkowitz, 2004, p.7). Pluralistic ignorance is seen as a alarming misperception in that it “encourages individuals to suppress healthy, non-risky attitudes and behavior that are erroneously thought to be non-conforming in exchange for permissiveness of risky behaviors” (Berkowitz, 2004. p.7). Normative feedback is an efficacious strategy in impacting pluralistic ignorance by informing the majority that their behavior and attitudes are actually more normative than they think (Perkins, 2003; Berkowitz, 2004). Through correcting misperceptions associated with pluralistic ignorance individuals are provided with encouragement and strength to act on values that are consistent with non-risk taking behaviors. False consensus is a self-serving bias associated with individuals with problematic behavior patterns. Individuals who subscribe to false consensus operate from the belief that peers’ perceptions and behavior are more like their own allowing them to remain in denial about the problems associated with their behavior (Berkowitz 2004). False consensus serves to justify problem behavior and perception for those who engage in risk taking behavior. Borsari and Carey (2001) noted that the more that students perceive that others engage in drinking behavior, the higher personal consumption will be. Through conducting a meta-analysis from 23

studies Borsari and Carey (2003) conducted a meta-analysis consisting of 23 studies and found evidence supporting the influence of misperceptions on behavior. Data from the 23 studies revealed that there were misperceptions between actual and perceived norms that drive the perceptions and behaviors of college students surrounding alcohol consumption. This “gap” in perception has important influence on behavior and decision making in the college population supporting the notion that perceived social norms influence college students. Research has documented similar impact for other problem behaviors. False uniqueness is described as belief by the majority that their perception and behavior are unlike that of their peers and assume that their perception and behaviors are more different from others than they actually are (Berkowitz, 2004).

As a greater understanding for the specifics of social norms theory has been achieved by a growing body of literature and research by proponents of the approach, strategies are now being applied to expanded social issues in different populations (Berkowitz, 2010). The efficacious results of studies on use of social norms theory in areas concerning physical health through reduction in problematic drinking, cigarette smoking, and violent behaviors (Berkowitz, 2004; 2010; Borsari & Carey, 2003; Perkins, 2002) have prompted further investigation of issues of mental health through use of social norms. By understanding attitudes of college students toward professional psychological services important steps can be taken to encourage students to engage in counseling services to achieve better holistic health and wellness. The current study serves to add to this body of literature.



### **Purpose of the Study**

The purpose of this study was to examine whether or not statistically significant mean differences existed among college students attitudes and their perception of their peers' attitudes toward help seeking behavior. The study further sought to determine whether or not statistically significant mean differences existed between male and female college students' attitudes and perception of their peers' attitudes toward help seeking behavior. The current study investigated the social norms surrounding college students' attitudes toward help seeking and their perception of peer attitudes toward help seeking in order to gain insight into the attitudes and perceptions of this population. This study was conducted as part of an effort to advance knowledge about social norms, mental health, and college students in order to develop effective programming to stimulate mental health and wellness among the college population. This study serves to advance the body of literature on social norms theory by providing descriptive research about college students' attitudes toward professional mental health treatment and services and their attitude toward the extent to which these behaviors occur. This information will provide normative feedback to serve as a foundation for future social norms strategies to positively impact campus mental health. The current study investigates individual attitudes toward help seeking behavior as well as individuals' perception of peer attitudes toward help seeking behavior.

This study compared the means of individual attitudes toward help seeking behavior and perception of peer attitude toward help seeking behavior through use of a repeated measure analysis of variance (ANOVA). The researcher utilized a convenience

sample of approximately 200 Ohio University students enrolled in classes in the College of Health Sciences and Professions and The Patton College of Education during the fall semester of the 2012-2013 academic year. The students will receive questions about demographic information, the Inventory of Attitudes Toward Seeking Mental Health Services, and an adapted version of the Inventory of Attitudes Toward Seeking Mental Health Services.

This topic was selected based on national trend data indicating that mental health issues continue to be prevalent in the undergraduate student population (American College Health Association, 2010). Literature indicates that peers represent one of the most important reference groups to whom college students turn to for advice, support, and modeling (Turrisi et al., 2009) supported the idea that social norms approach can be useful in positively impacting attitudes toward help seeking behavior. This suggests that peers play an important role in the attitudes and willingness of students to participate in help seeking behavior. Exaggerated perceptions have been shown to significantly contribute to unhealthy behavior patterns (Perkins & Craig, 2003) indicating that correcting these misperceptions about the extent of problem behaviors and attitude toward seeking help for mental health issues will have a positive impact on willingness to participate in counseling subsequently positively impacting the mental health issues in college students.

### **Need for the Study**

The mental health of undergraduate students represents a growing concern (Hunt & Eisenberg, 2010). College life is characterized by change and the presence of stressors

that often predispose individuals to mental health issues making psychiatric disorders prevalent among college students (Blanco, et al., 2008). In fact, mental health issues are as common in college students as in their same-aged nonstudent peers (Blanco et al, 2008) with current research indicating that these disorders are increasing in prevalence and severity as 91% of college counseling center directors report a recent trend toward greater numbers of students with severe psychiatric problems (Gallagher, 2011).

According to the World Health Organization (2008) mental health disorders account for nearly one-half of the disease burden for young adults in the United States making it one of the most significant public health problems among adolescents and young adults (Hunt & Eisenberg, 2010). However, more research is necessary for colleges to capitalize on the opportunity to positively impact this emerging threat to the health of young Americans (Hunt & Eisenberg).

While levels of psychiatric disorders and emotional issues continue to plague college students, little research has focused on the impact of collegiate programming and resources on the mental health of students (Hunt & Eisenberg, 2010). Instead, research focuses on the prevalence of mental health issues with little research on evidence of effective programming and policies. The demand for outcome based programming shows promise for implementation of social norms based strategies to encourage participation in campus mental health services (Perkins, 2002; Turrisi et al., 2009). However, it is first necessary to understand student attitudes toward help seeking and the factors that influence their perspectives. “Mental health professionals identify that in order to reduce the barriers to seeking help effectively, they need to understand what

keeps people from seeking services enabling them to create successful interventions” (Vogel, Wade, Wester, & Hackler, 2007c, p. 247). It is clear that social norms play a role in individual decisions to seek help, however more research is necessary to determine the level of influence that these norms have on the attitudes toward help seeking and decisions to seek professional help (Vogel et al., 2007b).

This research problem is significant to counselors, school counselors, and prevention experts because of the theoretical and practical implications. There is a question as to whether or not the social norms can be generalized to provide insight to meet the needs of varying populations with unhealthy behaviors beyond alcohol consumption (Fabiano, 2003). The current study expands the typical topic of focus for social norms on physical health, and explores the impact of social norms on mental health in college populations in effort to increase the attention and focus placed on mental health interventions by proponents of the social norms approach.

The field of prevention is becoming more stringent in requiring scientific-based interventions with increasing demand for outcome-based strategies, however broad research is limited on adolescents and young adult populations (Hunt & Eisenberg, 2010). This departure from traditional reactive strategies and the notably efficacious data on the reduction of substance abuse and other problem behaviors that have been achieved through social norms approaches (Perkins, 2003) create a case for applying social norms interventions to a wider array of health promoting behaviors and social issues for adolescent and young adult populations. The current research provides valuable information about social norms among postsecondary school students’ attitudes toward

counseling and mental health services. The repeated measure analysis of variance (ANOVA) employed in this study may provide useful information to the field of prevention and the applicability of social norms based interventions. Mental health treatment is critical to reduction of impairment and restoration of typical levels of functioning and productivity in the adolescents and young adults who represent our future (Blanco et al., 2003). This study adds to the body of research on mental health services and preventative wellness as well as social norms theory by examining another topic for expansion of the use of social norms strategies among adolescent and young adults.

### **Research Questions**

This study will address the following research questions:

1. Are there statistically significant mean differences among college students' attitudes and perceptions of their peers' toward help seeking behavior (as measured by total scores on the Inventory of Attitudes Toward Seeking Mental Health Services)
  - a. Are there statistically significant mean differences among college students' attitudes and perceptions of their peers' toward mental health help seeking behavior (as measured by subscale Psychological openness on the Inventory of Attitudes Toward Seeking Mental Health Services)?
  - b. Are there statistically significant mean differences among college students' attitudes and perceptions of their peers' toward mental health help seeking behavior (as measured by subscale help-seeking propensity on the Inventory of Attitudes Toward Seeking Mental Health Services)?

- c. Are there statistically significant mean differences among college students' attitudes and perception of their peers' toward mental health help seeking behavior (as measured by subscale indifference to stigma on the Inventory of Attitudes Toward Seeking Mental Health Services)?
2. Are there statistically significant mean differences among male and female college students' attitudes and perception of their peers' attitudes toward mental health help seeking behavior (as measured by total scores on the Inventory of Attitudes Toward Seeking Mental Health Services)?
  - a. Are there statistically significant mean differences among male and female college students' attitudes and perception of peers' attitudes toward mental health help seeking behavior (as measured by subscale psychological openness on the Inventory of Attitudes Toward Seeking Mental Health Services)?
  - b. Are there statistically significant mean differences among male and female college students' attitudes and perception of peers' attitudes toward mental health help seeking behavior (as measured by subscale help-seeking propensity on the Inventory of Attitudes Toward Seeking Mental Health Services)?
  - c. Are there statistically significant mean differences among male and female college students' attitudes and perception of peers' attitudes toward mental health help seeking behavior (as measured by subscale indifference to

stigma on the Inventory of Attitudes Toward Seeking Mental Health Services)?

### **Null Hypothesis**

The current study will address the following null hypotheses:

1. There are no statistically significant mean differences among college students' attitudes and perception of their peers' attitudes toward mental health help seeking behavior (as measured by the total scores on the Inventory of Attitudes Toward Seeking Mental Health Services).
  - a. There are no statistically significant mean differences among college students' attitudes and perception of their peers' attitudes toward mental health help seeking behavior (as measured by subscale psychological openness on the Inventory of Attitudes Toward Seeking Mental Health Services).
  - b. There are no statistically significant mean differences among college students' attitudes and perception of their peers' attitudes toward mental health help seeking behavior (as measured by the subscale help-seeking propensity on the Inventory of Attitudes Toward Seeking Mental Health Services).
  - c. There are no statistically significant mean differences among college students' attitudes and perception of their peers' attitudes toward mental health help seeking behavior (as measured by the subscale indifference to

stigma on the Inventory of Attitudes Toward Seeking Mental Health Services).

2. There are no statistically significant mean differences among male and female college students' attitudes and perception of their peers' attitudes toward mental health help seeking behavior (as measured by total scores on the Inventory of Attitudes Toward Seeking Mental Health Services).
  - a. There are no statistically significant mean differences among male and female college students' attitudes and perception of their peers' attitudes toward mental health help seeking behavior (as measured by subscale psychological openness on the Inventory of Attitudes Toward Seeking Mental Health Services).
  - b. There are no statistically significant mean differences among male and female college students' attitudes and perception of their peers' attitudes toward mental health help seeking behavior (as measured by subscale help-seeking propensity on the Inventory of Attitudes Toward Seeking Mental Health Services).
  - c. There are no statistically significant mean differences among male and female college students' attitudes and perception of their peers' attitudes toward mental health help seeking behavior (as measured by subscale indifference to stigma on the Inventory of Attitudes Toward Seeking Mental Health Services).



The null hypotheses were developed based on the procedural strategy and the dependent and independent variable interaction.

### **Variables**

The study will include one independent variable, a between group variable: gender with two levels; male and female and one dependent variables, a within group variable: perception of attitude toward help seeking with two conditions: self and perception of peer attitudes, measured by the Inventory of Attitudes Toward Seeking Mental Health Services and the adapted version of the Inventory of Attitudes Toward Seeking Mental Health Services.

### **Limitations and Delimitations**

The delimitations for the study include; the boundaries for studying students at one Midwestern university, accessible classes via instructor permission, and the competence of the researcher. While there are many factors that could impact the college students' attitudes toward help seeking this study was delimited by the inclusion of gender, peer influence, and socioeconomic status. The study will also be delimited by the investigation of one independent variable and one dependent variable.

The limitations of this study include; the truthfulness of respondents, social desirability of responses, instrumentation, phrasing of the survey questions, reading level of the respondents, sampling, and form of operationalizing variables. A convenience sampling strategy will be used to obtain a sample of Ohio University students. Although the sampling strategy was adequate for the current study, a more extensive sampling of college students throughout the state or the country would be much more idyllic in order

to make generalizable inferences about the population. The ability to generate a representative sample will be based on response rate. The demographic makeup was not adequately represented, therefore the results will not be overly generalizable as they will not be applicable to a larger population based on different composition of race and gender.

### **Definition of Terms**

The operational definitions of the variables in this study were defined as follows:

1. Attitudes Toward Help-Seeking – The attitudes that Ohio University students have toward seeking professional psychological help as measured by Attitudes Toward Seeking Professional Psychological Help Scale (Fischer & Turner, 1970).
2. Counseling – The process in which a trained professional helps a person to function more efficiently and have an improved way of life by addressing problems in a preventative, developmental, or remedial way (Gallagher, 2010).
3. Social norms – the specification of behaviors that are desirable to social groups (Perkins, 2003).
4. Social norms theory – “situations in which individuals incorrectly perceive the attitudes and/or behaviors of peers and other community members to be different from their own when in fact they are not” (Perkins, 2003, p.8).
5. Wellness – physical, mental, and social well-being (Lee et al., 2009).
6. Psychological openness – “the extent to which individuals are open to acknowledging psychological problems and the possibility of seeking help for psychological issues” (Mackenzie, Knox, Gekoski, & Macaulay, 2004, p.575).

7. Help-Seeking propensity – “the extent to which individuals believe they are willing and able to seek professional psychological help or mental health services” (Mackenzie, Knox, Gekoski, & Macaulay, 2004, p.575).
8. Indifference to stigma – the extent to which individuals are concerned about what significant people in their lives may think if they were to find out that the individual was seeking professional mental health services for psychological problems (Mackenzie, 2004).

## Chapter 2: Literature Review

The purpose of this study was to examine whether or not statistically significant mean differences existed among college students attitudes and their perception of their peers' attitudes toward help seeking behavior. The study further sought to determine whether or not statistically significant mean differences existed between male and female college students' attitudes and perception of their peers' attitudes toward help seeking behavior. The current study investigates the social norms surrounding college students' attitudes toward help seeking and their perception of peer attitudes toward help seeking in order to gain insight into the attitudes and perceptions of this population. This study was conducted as part of an effort to advance knowledge about social norms, mental health, and college students in order to develop effective programming to stimulate mental health and wellness among the college population. This study serves to advance the body of literature on social norms theory by providing descriptive research about college students' attitudes toward professional mental health treatment and services and their attitude toward the extent to which these behaviors occur. This information will provide normative feedback to serve as a foundation for future social norms strategies to positively impact campus mental health. The current study investigates individual attitudes toward help seeking behavior as well as individuals' perception of peer attitudes toward help seeking behavior.

This study employed a repeated measures ANOVA to examine whether or not statistically significant mean differences existed among college students attitudes and their perception of their peers' attitudes toward help seeking behavior and whether or not

statistically significant mean differences existed between male and female college students' attitudes and perception of their peers' attitudes toward help seeking behavior. A critical review of the literature presents an introduction and critical review of significant research and publications. The chapter will be divided into six sections. First, the body of literature surrounding the basic tenants of campus wellness and the promotion of health behaviors is discussed. Second, the status of mental health on college campuses focusing on attitudes toward help-seeking behavior is discussed. Third, social norms theory and subsequent research and interventions is discussed. The literature review emphasizes the growth and development of social norms theory based on the social problems that exist in adolescent and young adult culture and the impact that social norms has on healthy behaviors. Fourth, the impact that gender has on attitudes toward help seeking is outlined. Fifth, the role that socioeconomic status has on attitudes toward help seeking is considered. Finally, the role that social norms play in attitudes toward help seeking behavior and subsequent stigma is examined.

### **Wellness on College Campuses**

In recent years the general public has expanded its interest in wellness (Savolaine & Granello, 2002). Consistent with this trend, college campuses are intensifying their focus on wellness to promote healthier behaviors in young adults (Myers & Mobley, 2004). In an effort to identify prevention strategies to stimulate healthier college campuses, many universities are taking steps to assess the health promoting behaviors of their students (LaFontaine et al., 2008). Responding to the wellness movement in universities, The American College Health Association National College Health

Assessment (ACHA-NCHA II) is a national research survey organized by the American College Health Association to assist college health service providers, including counselors, by providing the largest comprehensive data set about college students habits, behaviors, and perceptions on health topics (American College Health, 2004).

Notably, The American College Health Association National College Health Assessment II includes questions about the mental health of college students, unhealthy behavior patterns, and their perception of peer participation in unhealthy, risk-taking behaviors in order to gain important insight into the impact of mental health issues. Questions regarding perception of peer behavior and attitudes are specifically central to understanding health behaviors as a growing body of evidence suggests that perceptions of social norms influence health behaviors (Mahalik, Burns, & Syzdek, 2007).

The American Association for Counseling and Development, now the American Counseling Association adopted a resolution on July 13, 1989 that committed the organization and associated counseling professionals to advocate for optimum health and wellness. This pledge promised a proactive stance in relation to wellness issues and demonstrated the historical ties between the fields of counseling and wellness (Myers, 1992). The profession of counseling has demonstrated a committed stance surrounding holistic wellness through incorporating wellness, into their fundamental beliefs system (Meyers, 1992) therefore taking steps to ensure that mental health is included in campus wellness strategies should be organic.

Throughout the 1990's the fields of prevention and wellness were undergoing uncompromising change. The transition from approaches that focused on the negative

impact of unhealthy behaviors and the subsequent consequences toward proactively addressing the broader social environment and the attitudes and behaviors of the majority (Berkowitz, 1997). As a result of the shift in perspective among prevention experts and researchers came undeniable attention to the promising results achieved through the use of social norms theory to combat problematic drinking patterns on college campuses (Perkins, 2003). Confirmation is provided in the literature to show the importance of correcting misperceptions to reflect a commitment to wellness can positively impact college student decision-making regarding a holistic approach to their overall health and wellness (Turner, Perkins, & Bauerle, 2008).

Addressing the wellness of first year college students may be a specifically efficacious approach toward motivating wellness behaviors on college campuses (LaFontaine et al., 2006). Building wellness strategies on the needs and beliefs of individual first year students promotes a shift in making wellness a greater priority among the student body through interaction with first year students and interventions aimed at college freshman. The climate of campus environments can become a platform for health promoting behavior in individual students through knowledge of a university commitment to wellness and changing of social norms regarding physical and mental health (LaFontaine et al., 2006).

The social norms approach to prevention has grown out of a need to depart from traditional strategies in order to encourage healthy behavior choices in adolescents and young adults. Social norms interventions that seek to correct misperceptions about peer attitudes and behaviors have achieved promising results and have resulted in reduction of

problematic drinking patterns in many university settings across the country (Perkins, 2003; Berkowitz, 2004; LaBrie, Hummer, Neighbors, and Pederson, 2008; Turner et al., 2008). More than 75 published studies in peer reviewed journals note the successful impact that social norms interventions have on unhealthy, problematic behaviors (Berkowitz, 2010). Based on the effectiveness of social norms interventions in promoting healthy behavior and the renewed focus on wellness at the collegiate level; future research is necessary to expand the use of social norms theory beyond the perception of behaviors of college students and problematic drinking patterns.

The integration of body and mind is an important element of the World Health Organization's definition of wellness that incorporates the physical, mental, and social aspects of individuals (Myers & Sweeney, 2008). Through inclusion of mental health in this definition of wellness increasing attention has surfaced about the impact of mental health disorders on the wellness of American culture. In response to the growing concern about wellness, many theories and scales have emerged to evaluate the wellness of Americans (Myers & Mobley, 2004; LaFontaine et al., 2006; Myers & Sweeney, 2008). These types developments have prompted research studies in counseling to further investigate the presence of healthy behaviors and attitudes among United States citizens.

The cross-section of counseling and wellness is not a new concept. The counseling profession has demonstrated a commitment to the paradigm of wellness since its inception (Myers & Sweeney, 2008). The concept of advocating for wellness has been deeply embedded in the historical roots of counseling and more recently the American Counseling Association has become more focused on their platform regarding wellness



and strategies to encourage wellness (Myers, 1992). Counseling is a wellness-oriented approach to optimizing the growth and development of individuals (Myers & Sweeney, 2008). This historical affiliation between counseling and wellness has prompted much research to investigate the best strategies to promote healthy lifestyles among Americans.

While there are numerous models of wellness and countless measures to accompany these theories, some of the more prominent paradigms have received significant attention in the literature. Many of the early models of wellness such as Hettler's hexagon, were considered to be holistic, when in reality their emphasis was primarily on the physical aspects of health (Myers & Sweeney, 2008). Hettler's hexagon consists of six elements of being: occupational, social, emotional, intellectual, physical, and spiritual (Myers & Sweeney). Each of these components are represented as equal parts depicting the importance of each of these factors in holistic wellness (Myers & Sweeney). In departure from the wellness models that focused on the hard sciences, Sweeney and Witmer (1991) and Whitmer and Sweeney (1992) developed the first model of wellness that was based on comprehensive health and incorporated mental health with roots in counseling. The Wellness Wheel (Sweeney & Witmer, 1991; Witmer & Sweeney, 1992) is a theoretical model that approaches wellness from an ecological standpoint where all of the components of wellness are interactive (Myers, Sweeney, & Whitmer, 2000). The Wheel of Wellness, which emerged from a cross-disciplinary attempt to identify empirical correlates of health, quality of life, and longevity, provides a visual representation of the need for a balanced lifestyle and is still a useful implementation in counseling (Myers & Sweeney, 2008). The Wellness Wheel is the

basis for the Wellness Evaluation of Lifestyle assessment instrument (Myers & Sweeney, 2008). Despite years of usage and positive feedback for multicultural sensitivity, statistical analysis failed to support the complex structure of the model (Myers & Sweeney, 2008).

With the paradigm of wellness at the forefront of counseling beliefs, Myers (1992) identified the need for outcome research to show the positive effects of wellness interventions and prove the efficacy of services. In response to the demand for outcome-based practice, Myers and Sweeney (2005) developed the Invisible Self evidence based model of wellness. With ecological focus the Invisible Self model provided empirical evidence of the interaction of components representing improvement from the hypothetical interaction of components demonstrated by the Wellness Wheel (Myers & Sweeney, 2008). Like the Wellness Wheel, The Invisible Self has a measurement instrument, the Five Factor Wellness Inventory with versions to accommodate different populations (Myers & Sweeney, 2005). Professional focus on the impact of wellness in counseling and mental health prompts continued research and development of new models and assessment instruments to demonstrate the effectiveness of these strategies. The current study serves to contribute to the body of research on the mental health component of the wellness paradigm through advancing the understanding of college students' perspectives on mental health help seeking behaviors. With a renewed focus on wellness on college campuses and the need to promote mental health awareness, understanding the perspective of college students on help seeking is critical facet of developing mental health effective intervention strategies.

The literature reflects multiple studies that have been conducted on wellness models and instrumentation (Myers & Sweeney, 2008). The first step in establishing effective programming is assessing the health promoting behaviors to create healthier campus environments (LaFontaine et al., 2006). In developing an understanding of the dynamics of wellness across the developmental life span it is necessary to investigate varied populations and cultural groups (Myers & Sweeney, 2008). While literature encourages studies on wellness across the life span, researchers often opt to use college students in their studies as samples of convenience are appealing (Myers & Sweeney, 2008). Research studies using undergraduates dominate the wellness literature in the field of counseling leaving other populations under-investigated (Myers & Sweeney, 2008), however few studies about the effectiveness of campus wellness programs exist (Myers & Mobley, 2004). With evidence of much need for wellness interventions at the collegiate level it is important that continued research is conducted to determine the effectiveness of programs so that the campus wellness trends may be successful in promoting healthy behaviors.

As a result of the studies being conducted on wellness, researchers have emphasized the need to for wellness programs on college campuses (Myers & Mobley, 2004). This need for programming comes in response to the lower levels of wellness found in both traditional and non-traditional college students in comparison to their same age peers (Myers & Mobley 2004). Mental health issues have received considerable attention as a threat to the health of college students. With depression being considered one of the three leading causes of disease burden in the United States and mental health

disorders accounting for 3 of the 10 leading causes of disease burden in women ages 15-44 years old (World Health Organization, 2008) wellness strategies have begun to focus on mental health disorders and problems in the college population.

College represents a time of unparalleled transition in the lives of young people. With an estimated 19.7 million Americans enrolled in universities in the fall of 2011 (Bureau of Educational Statistics, 2011) many young people are affected by the lack of healthy attitudes and behavior patterns. First year college students, away from the comforts of home for the first time, are met with tremendous stressors and potential for mental health issues (Myers & Mobley, 2004; LaFontaine et al., 2006). Stress impacts approximately 52.1% of college students (Hudd, Dumalo, Erdmann-Sager, Murray, Phan, & Soukas, 2000) making them at risk for being both mentally and physical unhealthy. Through focus on promoting healthy behaviors in college students, a large number of Americans can be reached at a pivotal time in life (LaFontaine et al., 2006). By imparting knowledge about wellness and focusing attention on wellness behaviors in college students, health and education professionals can develop programming to positively impact students to enhance academic success and encourage sustained wellness through lifespan (LaFontaine et al., 2006).

### **Mental Health on College Campuses**

Mental health among college students represents one of the most significant health concerns among late adolescents and young adults as mental health problems are highly prevalent among college students according to various data sources (Hunt & Eisenberg, 2010). The National Survey of Counseling Center Directors 2010 (Gallagher,

2010), funded by the Provost's Office at the University of Pittsburgh and the American College Counseling Association, retrieved information from 320 university counseling centers in attempt to stay current with counseling trends and concerns in the collegiate population. Data from the survey revealed some significant mental health concerns among university students as data indicated notable increases in mental health issues among the student body. Statistics from the survey results indicated that while 2.75 million students were eligible for counseling services, only 10.8% of enrolled students, approximately 317,000 sought counseling in 2011 (Gallagher, 2010). An overwhelming majority of counseling directors, 91%, reported a trend in toward greater numbers of students with severe psychological problems with notable increases in the following areas over the past five years: 70.6% crisis issues requiring immediate response, 68% psychiatric medication issues, 60% learning disabilities and school related stress, 45.7% alcohol abuse, 45.1% illicit drug use, 39.4% self-injury issues, 25.2% on-campus sexual assault, 24.3% eating disorders, 23.2% career and future planning issues, and 23.1% problems related to earlier sexual abuse. Directors also reported that 44% of their clients have severe psychological problems with 6.3% having such severe impairment that they are unable to remain in school or can only do so with extensive psychiatric treatment and 37.7% experiencing severe problems that can be successfully treated with counseling modalities (Gallagher, 2010). As mental health problems with college students increase in prevalence, it is important to first understand their feelings about counseling and mental health services in order to provide treatment modalities that are effective.

According to data collected by the American College Health Association in the 2008 National Health Assessment, more than one in three undergraduate students reported “feeling so depressed it was difficult to function” while over half of the students polled reported “feeling very sad” and “overwhelmingly anxious.” In a study conducted at 70 universities encompassing 26,000 students Drum, Brownson, Denmark, and Smith (2009) found that 6% of undergraduates and 4% of graduate students seriously considered suicide within the previous 12 months. Blanco et al. (2008) compared a nationally representative sample of college students and their same age non-college-attending peers through use of the 2001 – 2002 National Epidemiological Survey on Alcohol and Related Conditions. Blanco et al. compared college students and their non-college-attending peers across an array of psychiatric disorders yielding many insightful results. The study showed that the two groups had the same overall 12-month prevalence of mental disorders including mood and anxiety disorders (Blanco et al.). Staggeringly, results showed that nearly one half of the college students met criteria for at least one DSM-IV diagnosis (Blanco et al.). These studies exemplify the need for a greater understanding for undergraduates’ attitudes toward seeking professional help in order to combat the epidemic of psychological issues impacting the health of adolescence and young adults.

In addition to studies that document significant mental health diagnosis in college students, there is an abundance of research documenting the impact of social problems, mental health problems, and difficulty with adjustment that merit the attention of the mental health professionals. In addition to the stress and anxiety that many college

students experience (American College Health Association, 2008) many college student misuse alcohol. Blanco et al. (2008) documented that alcohol use among college students is more widespread than their same age peers. Much of the literature on social norms theory and mental health in the college population documents the widespread alcohol use among college students. The highest proportion of diagnosable alcohol disorders, heavy drinking, and multiple substance dependencies exist in individuals who are 18-29 years old (Turrisi et al., 2009). Notably, 92% of all college students fall within this age range (Turrisi et al.). In the National College Health Assessment, the American College Health Association (2008) found that nearly 66% of college students reported using alcohol within the last 30 days. Undergraduate alcohol consumption represents another significant threat to the health of college students necessitating the expertise of counseling professionals in order to positively combat problematic drinking patterns in adolescents and young adults.

Mental health among college students represents both a concern and an opportunity as a large number of young people can be reached and helped to engage in health promoting behavior (Hunt & Eisenberg, 2010). As nearly one half of the disease burden for young adults being attributed to mental health disorders (World Health Organization, 2008) it is necessary for mental health professionals to assess adolescents and young adults attitudes toward help seeking in order to encourage them to focus on their mental health. Blanco et al. (2003) found that nearly one half of the 43,093 respondents in his study met the DSM-IV TR criteria for one psychiatric disorder, however mental health treatment rates were low. Since mental health issues are

becoming increasingly high and motivation for seeking treatment low, it is important for mental health professionals to become more competent in assessing individual attitudes toward mental health services and the impact that their peers have on their decision to seek mental health treatment.

Understanding students' perspective on counseling and current mental health trends in college is fundamental to shaping effective treatment so that counselors can plan intervention strategies and concentrate their efforts on the most pervasive issues (Benton, 2003). Due to increased prevalence and severity of mental health issues in college students it is important for mental health professionals to recognize the source of issues causing the increase (Hunt & Eisenberg, 2010). However, the substantial rise in mental health issues among students suggest that most of the counseling needs are related to factors specific to the college population and issues associated with emerging adulthood (Arnett, 2000; Hunt & Eisenberg, 2010). These changes and stressors associated with college life predispose young people to problems relating to their mental health (Lee et al., 2009).

College counseling services were created as a response to these adjustment difficulties and mental health needs with research showing that use of these facilities can ease personal difficulties such as depression, anxiety, and loneliness (Lee et al., 2009). It is very important for those students who experience problems to have a positive attitude toward help seeking in order for treatment to help and support them effectively (Lopez et al., 1998). Research to gain insight into college students attitudes toward help seeking will aid in the effort to encourage undergraduates to engage in counseling services.



University personnel want young people to succeed in their academic and social lives through having the skill set to establish and maintain positive peer relationships, to navigate the significant demands of growth and development, and to enhance their focus on wellness to promote health and avoid risky behaviors (Payton et al., 2000). The prevalence of psychiatric disorders is high in college populations as a result of emerging development, transition, and immense stress, however with effective mental health treatment and heightened awareness of the importance of good mental health most impairment will subside (Blanco et al., 2003).

### **The Impact of Gender on Mental Health in College Students**

Specific subgroups within the college population are more susceptible to mental health problems (Hunt & Eisenberg, 2010). One subgroup that is specifically impacted by the disparities in mental health problems and mental health behaviors are men and women. The literature reflects the differences that exist between men and women in their issues with mental health and their approach toward mental health (Moller-Leimkuhler, 2002; Vogel et al., 2007). Gender has been found to play a role in attitudes toward help seeking (Vogel et al., 2007c) with research showing that women have more positive attitudes than men regarding mental health services (Fischer & Farina, 1995) as women seek the help of mental health professionals twice as frequently as their male counterparts (Moller-Leimkuhler, 2002).

Gender appears to be a predictor of mental health behavior and attitudes toward help seeking and is considered an important predictor of help seeking behavior (Vogel et al., 2006). However the relationship between gender and help seeking attitudes or

intentions is not always a straightforward relationship (Moller-Leimkuhler, 2002; Vogel et al., 2005). Men have consistently had a less positive attitude toward seeking mental health services than women (Addis & Mahalik, 2003; Vogel & Wester, 2003). The National Survey of Counseling Center Directors (Gallagher, 2010) reported that 65% of center clients are female and 35% are male. The survey also indicated that 95% of directors report that female students tend to overuse their services relative to their campus population percentage while the majority of directors indicate that men tend to underutilize Counseling services (Gallagher, 2010). However, male college students are at higher risk for suicide while women are more likely to incur depressive symptoms and anxiety (Hunt and Eisenberg, 2010). Gender differences do exist in prevalence of mental health issues and attitudes toward counseling services.

The American College Health Association National Health Assessment (2011) reported significant gender differences pertaining to mental health problems. The results from the survey conducted on college students reported disparities between genders in the prevalence of mental health stressors that include: 66.3% of women reported feeling sad within the past 12 months while 51.3% of men reported feelings of sadness, 91.4% of women felt overwhelmed within the past 12 months while 77.0% of men felt overwhelmed, 56.0% of women reported feelings of anxiety while 40.5% of men reported feeling anxious, and 61.3% of women reported feeling lonely in the last 12 months while 50.0% of men reported those same feelings. The information yielded from the survey consistently represented differences between men and women in the experience of mental health symptomology.

Mental health literature has largely been focused on women as females seem to have the greatest mental health issues (Mokker-Leimkuhler, 2002). Women repeatedly espouse more positive attitudes toward professional help seeking and report greater intentions to actually seek help (Fischer & Turner, 1970). Research shows that men are more likely to engage in health risk behaviors and substance use (Mahalik et al., 2007). Men have also been found to be less willing to consult with mental health professionals and less willing to engage in preventative programming and behavior (Mahalik et al., 2007). Much of the literature assumes that many observed differences between men and women and their mental health and participation in mental health treatment be attributed to gender-related bias (Moller-Leimkuhler, 2002). Differences in attitudes toward help seeking, help seeking behavior, symptom reporting patterns, and self report can be credited to gender-biased perceptions (Moller-Leimkuhler). Self-stigma associated with seeking psychological help was different for men and women especially when services had been sought out in the past (Vogel et al., 2006).

### **The Impact of Socioeconomic Status on Mental Health**

Research shows a well-documented relationship between mental illness and socioeconomic status (Eisenberg & Hunt, 2010) confirming the role that socioeconomic status in health care disparities (Fulda, Lykens, Bae, Singh, 2009). The inverse relationship between socioeconomic status and mental illness is one of the most repeated findings in social science literature (Hudson, 2005). Research consistently suggests that the lower socioeconomic strata suffers more with mental health issues (Hunt & Eisenberg, 2010), but the causal structure of this relationship is less clear (Hudson, 2005).

Hudson (2005) reported a direct relationship between socioeconomic status and rate of mental illness.

What is less clear in the literature is the relationship between adult socioeconomic status and adolescent mental health. Childhood poverty is believed to predispose individuals to mental illness in adolescents and adulthood (Barrett & Turner, 2005). Hunt and Eisenberg (2010) reported that students from lower socioeconomic backgrounds are at higher risk for problems with anxiety and depression. Fulda et al. (2009) found that the lowest participation in mental health services came from the lowest socioeconomic strata investigated in their study. There are several factors seen to contribute to this disparity of mental health services in young people including: family structure, parenting quality, education level, and stress (Barrett & Turner, 2005).

During the 1990s research on the relationship between socioeconomic status became a greater focus as researchers examined their causal relationship through use of longitudinal studies (Hudson, 2005). It is critical to understand risk factors and indicators of socioeconomic status (Fulda et al., 2009). Indicators that are repeatedly found in the literature include: education level, income, and occupation (Hudson 2005; 1998). There is also evidence of the impact of social selection in the literature as it has been suggested that mentally ill individuals gravitate toward low socioeconomic neighborhoods (Dembling, Rovnyak, Mackey, & Blank, 2002; Hudson, 2005). Dembling et al. (2002) performed an 18 year longitudinal study to investigate the migration patterns of 11,725 psychiatric patients in Virginia. They found that over half of the patients moved to areas in the lower socioeconomic strata (Dembling et al., 2002).

The interaction between gender and socioeconomic status yields inconsistent results concerning the impact of gender-related findings concerning the impact socioeconomic status on help seeking (Moller-Leimkuhler, 2002). In general low socioeconomic status is associated with consulting with primary care physicians as opposed to mental health professionals (Moller-Leimkuhler, 2002). However, the research focused on help seeking as a function of severity of illness or of social factors such as socioeconomic status, race or sex, there is a lack of explanation on how such factors operate to aid or to inhibit help seeking behavior and attitudes toward help seeking (Moller-Leimkuhler, 2002).

While the negative relationship between socioeconomic status and mental illness is a consistently documented topic in the literature and has been studied in a variety of ways the findings and underlying dynamics mandate future investigation (Hudson, 2005). Substantial correlation is said to exist between indicators of socioeconomic status, income, education, and employment (Hudson, 2005; 1998) as well as the type of mental illness examined (Hudson, 2005). Future research should continue to investigate the impact of indicators on socioeconomic status and mental illness as well as the impact of living circumstances, age, and gender so that intervention strategies can be focused on producing informative results to enhance our knowledge base on the causative nature of this relationship (Hudson, 2005).

### **Social Norms Theory**

Social norms theory is an approach to human behavior committed to understanding and documenting the role that peer influence has on behavior (Berkowitz,

2010). Social norms theory operates on the fundamental belief that individual behavior is profoundly impacted by individual perception (Berkowitz, 2002). The perception of impact that peer attitudes and behavior have on stances on social issues is believed to heavily influence individual behavior and decision-making (Berkowitz, 2002). “Some traditional theories fail to discern between peer influence on behavior being determined by what peers actually think and do or what individuals believe peers think and do” (Perkins, 2003, p.6). Social norms theory asserts that behavior is influenced by incorrect perceptions of how other members of our social groups think and act (Perkins, 2003). The theory predicts that “overestimations of problem behavior will increase problem behaviors while underestimations of non-risky behaviors will discourage individuals from engaging in them” (Berkowitz, 2004, p.7). Social norms theory emphasizes the importance of correcting the misperceptions of group norms in order to decreased problem behavior so that the individuals may more readily engage in healthy behavior patterns (Perkins, 2003; Berkowitz, 2004). This commonsense approach to changing perception, changing attitude toward the acceptability of problem behaviors, and decreasing risk-taking behaviors in adolescents through understanding of how peers influence behaviors and perceptions.

Berkowitz (1997; 2001; 2005) explains three types of misperceptions that impact social norms. Pluralistic ignorance is described as majority belief that their behavior is more much different from that of their peers when in fact it is not (Berkowitz 1997; 2001; 2005). Normative feedback is an efficacious strategy in impacting pluralistic ignorance (Perkins, 2003; Berkowitz, 2005). False consensus is a self-serving bias associated with

individuals with problematic behavior patterns. Individuals who subscribe to false consensus operate from the belief that peers behavior is more like their own allowing them to remain in denial about the problems associated with their behavior (Berkowitz 1997; 2001; 2005). False uniqueness is described as belief by the majority that their behavior is unlike that of their peers (Berkowitz 1997; 2001; 2005).

Misperceptions are closely associated with behaviors making them a critical issue in addressing problematic trends. Several studies in the literature document the predictive nature of misperceptions specifically with high school and middle school students, as well as college student populations. Sher (2001) conducted a study with Greek college students. Results concluded that misperceptions predicted problematic drinking patterns in this population (Sher, 2001). In a study of 1500 high schools D'Amico (2001) reported that misperceptions about peer drinking patterns predicted drinking patterns in high school students. Berkley-Patton (2003) conducted a study that documented the predictive nature of high school students' perceptions of college drinking patterns. Berkley-Patton (2003) determined that problematic drinking began prior to college. Results stated that targeting social norms interventions toward high school and middle school students would be an appropriate application (Berkley-Patton, 2003). Perkins (2003) conducted a study from the east Coast to the west coast to determine the applicability of social norms interventions to high school students. Results of Perkin's (2003) study revealed that misperceptions predicted drinking in this population.

Social norms theory is based on the fundamental belief that individuals overestimate the existence of problem behaviors while underestimating the existence of

healthy behaviors. As a result behaviors that are problematic becoming increasingly pervasive while behaviors that are healthy decrease (Berkowitz & Perkins, 1986; Perkins & Berkowitz, 1986; Berkowitz, 2002; Perkins 2003). The perceived norms, or beliefs that individuals have about the behavior and beliefs of peers, predict behavior more so than actual norms, or how peers actually behave and what they actually believe. The gap between actual and perceived norms is known as misperceptions. Berkowitz (1997; 2003) believes that these misperceptions drive problematic behavior in accordance with social norms theory. Interventions related to social norms theory are based on the belief that exposing actual norms in a believable and palatable manner will decrease problem behaviors while increasing comfort levels of expressing healthy behaviors; thus correcting behavior that operates on incorrect perceptions (Perkins, 2002).

The effectiveness of interventions for unhealthy behavior using the social norms theory is well documented in the literature. In the first application of social norms theory, Berkowitz and Perkins (1986) conducted a study with college students and drinking behaviors. They found that students had a misperception of peers drinking patterns and regularly overestimated their peers' support for drinking. This overestimation was found to be a predictor of how much students drank. As a result, an increase in problematic drinking patterns emerged. Up to this point many substance abuse prevention strategies emphasized problem behavior without acknowledging healthy norms. Through social norms strategies emphasis on healthy norms it is possible to remove the focus from problematic drinking patterns that reinforce unhealthy behaviors.. The study conducted at Hobart and William Smith Colleges demonstrated that



misperceptions concerning alcohol use exceeded actual norms. Prevention strategies reducing misperception to a more accurate level of peer norms demonstrated a positive effect (Perkins & Craig, 2003). Berkowitz and Perkins (1986) concluded that misperceptions and perceived norms predicted the drinking patterns in this population. Berkowitz and Perkins (1986) recommendations from this research study presented the social norms approach to prevention in simplistic terms: focus on providing students with accurate information on peer drinking attitudes and behavior in order to positively impact drinking perspectives and behavior. This conclusion laid the foundation for continued research and work in the area of prevention using the social norms perspective. As research proceeds forward the natural progression is to begin applying this theory in a greater capacity.

As Perkins and Berkowitz continued their work on social norms theory Michael Hansen became the first prevention specialist to apply the social norms approach to a college student population in his 1993 study. In a study at Northern Illinois University Hansen (1993) attained similar results concerning the predictive nature of misperceptions. In Hansen's (1993) longitudinal study, it was determined that social norms theory was a useful application in correcting misperceptions through providing a clear picture of accurate norms associated with drinking behaviors of the 23,000 students attending the university. NIU implemented a campus-based mass media campaign to change student perception of drinking norms resulting in sustained reduction in binge drinking over more than a six year period with an overall 35% reduction, 31% fewer alcohol-related injuries to self, and 54% fewer alcohol-related injuries to others (Hanson,

1993). From this study, Hansen gleaned that correcting normative beliefs through presentation of accurate social norms was a vital component in secondary school alcohol prevention programs. The future implication of this study encouraged further investigation of prevention programs aimed at changing perception of risky behaviors and attitude toward appropriateness of risky behaviors in high school students. This line of inquiry set the stage for the current research surrounding social norms theory including the current study.

Research in social norms theory continued to show the ineffectiveness of traditional prevention strategies and the pervasive patterns of misperception fueling problematic drinking patterns on college campuses across the country. Social norms research built on the findings from previous studies as investigations using this strategy preceded in university settings. The campus health social norms media campaign began in 1994 at the University of Arizona with objectives to: publicize alcohol use norms to change existing misperceptions, to support those norms with education strategies, and to change the conversation and attitude toward the extent to which high risk drinking occurred (Johannessen & Gilder, 2003). This strategy exposed the ineffective nature of traditional approaches that aimed at informing students about alcohol use through stressing awareness of problem drinking and subsequent consequences or efforts to intimidate heavier drinking students into less severe behavior. This social norms intervention employed print media campaigns with opportunity for feedback to improve the tactic. Through use of a social norms campaign researchers were able to bring attention to moderate drinking norms unmasking risky drinking behaviors as being

untypical for the majority of students (Johannessen & Gilder, 2003). Results from study at Western Washington University, supported strong correlations between introduction of social norms intervention and reduction of high-risk alcohol consumption and related problems (Fabiano, 2003). The information yielded from this study prompted prevention professionals at the university to incorporate social norms into existing intervention work. At the University of Arizona and Western Washington University students overestimated the drinking patterns of their peers and the extent to which risky drinking occurred and in both settings, the social norms approach was successful in correcting inaccurate norms and changing attitudes about the extent of heavy drinking resulting in changed behaviors.

As new studies emerged, social norms interventions continued to focus on problematic drinking patterns in college populations yielding consistent findings about the impact of misperceptions and inaccurate beliefs about the acceptability of problematic drinking on risky alcohol related behaviors. At Rowan University, a social norms project ensued to begin a campus wide conversation about drinking norms (Jeffery, Negro, Miller, & Frisone, 2004). In this investigation differences in gender became a factor in surveying drinking norms and differences between male and female drinking patterns were brought to the forefront and outreach to parents and the larger community in effort to bring more attention to the issue of inaccurate social norms that fueled behavior. Through involving parents and members of the community and bringing light to differences in drinking patterns between genders this social norms intervention was able to depict the gap between accurate and perceived norms. Highlighting these misperceptions brought attention to the negative impact that student, parent, and

community perception of norms and the extent to which problematic drinking occurred prompted risky drinking behaviors. Through use of media campaigns in the form of a wide variety of print media and informational sessions misperceptions related to student drinking patterns were corrected and the study yielded efficacious results. It is important to note that social norms interventions can be employed in a variety of ways and can be integrated into already existing prevention efforts or used in combination with other programming (Haines & Spear, 1996). Data from this research showed continued efficacious results using social norms interventions in different ways and in conjunction with existing prevention efforts. Conclusions from this study informed researchers that social norms interventions can be tailored to meet the diverse needs of a population and can be utilized with specific groups (Jeffery et al. 2003). This is a specifically important notion for the current study as social norms interventions were tailored to meet the needs of a relatively underserved population with risky behavior patterns beyond the focus of typical social norms interventions.

As a result of the influential data yielded from the Rowan University study concerning the ability of social norms interventions to be tailored to the specific needs of varying groups, research on small groups commenced at the University of Washington. Researchers found that specific high risk social groups consistently overestimated the drinking behavior of their peers and developed small groups norms-challenges to positively impact the drinking patterns of students. Taking the approach of integrating social norms theory into existing interventions social norms strategies targeted current campus alcohol prevention efforts working in the classroom and campus functions. The

goal of this study was to provide efficacious data support the impact small group social norms interventions as a workable system to deliver accurate social norms (Far & Miller, 2003). Researchers anticipated that the information associated with the social norms intervention would positively influence members of specific high-risk social groups and the larger population that models their behavior.

The study at the University of Washington represented a departure from traditional social norms interventions in procedure and focus. Students were given information on accurate social norms forty-five minute exposure time, while engaging them in voluntary, interactive, nonjudgmental discussions about norms and misperceptions including how perceptions are formed, extent to which behaviors occur, and the influence on alcohol-related behavior (Far & Miller, 2003). Researchers believed that the information sessions gave group members an opportunity to process the material necessary to produce meaningful behavior change in a way that is not afforded by social norms media campaigns. Efficacious results were achieved with future recommendations pertinent to the current study. The most important future implications are the importance of use of localized norms in conjunction with global norms and the adaptability of the strategy indicating that the intervention can be modified to meet the needs of the population and risky behavior relevant to the current study.

Successful outcomes with use of varying social norms interventions among college students engaging in high risk drinking prompted researchers to test the effectiveness of the theory with tobacco use. Results that suggested the adaptable nature of social norms interventions led up to this important advancement in applying the theory

to other risky behaviors. In the fall of 1999 a study began at Virginia Commonwealth University using social norms marketing campaigns. Through use of social norms researchers were able to expose the misperceptions in attitude concerning the extent to which tobacco was used and permissibility of tobacco use among students (Hancock & Henry, 2003). In light of the small sample size results of the social norms intervention were determined to be successful and cost-effective at the local level. This was a very notable progression to the relevance of social norms theory.

The increased applicability of social norms theory created a conversation about use of social norms theory in conjunction with other strategies to decrease college substance use. Up to this point, college administrators and prevention educators were in agreement that the best way to change behavior and motivate change was to present factual information and consequences about problem drinking (DeLong, 2003). As traditional strategies proved progressively ineffective in cessation of problem drinking behavior among college students, a need for new approaches have become increasingly necessary. In a study at the University of Colorado, college administrators deemed it necessary to create and implement new policies aimed at impacting problematic drinking patterns and subsequent negative social problems. The University of Colorado officials recognized that in order for a new policy to be effective the major sectors community must consider it relevant and necessary. With the knowledge that it takes more than statistics to gain the public attention and support needed for implementation of policy change it was determined that a new strategy was pertinent to mobilizing a solution to the social issues at the University of Colorado (DeLong, 2003). Administrators enlisted the

help of researchers and prevention experts in order to develop effective policy that would impact change in the student body.

University officials proceeded with an understanding that community-based motivation could be achieved with a strategy that could be integrated into other interventions and included presentation of facts and the scope of the problem germane to localized understanding of the social issue. Consistent with findings from other universities, researchers found that college students tended to dramatically overestimate the number of peers who engage in drinking and the attitude toward extent of drinking was driven by inflated norms (Berkowitz & Perkins, 1986; Perkins & Berkowitz, 1986; DeLong, 2003; Perkins, 2003). The aforementioned factors made implementation of a social norms media campaign a critical element in developing a new policy to combat problematic drinking in the college student population. At the heart of the strategy to gain support for the policy change was reaffirmation of the values of the majority of students at the University of Colorado who drank responsibly yet they were negatively impacted by the high-risk drinking of a minority of students (DeLong, 2003). Results from the study concluded that it is necessary for officials to expose the student support for new policy and correct any misperceptions associated with that support in order to positively impact change. This study represents another advancement in the applicability and adaptability of social norms theory and the effective use of social norms interventions in varying capacities.

Due to a rise in problematic drinking in the young adult population and associated negative outcomes the Montana Department of Transportation's Traffic Safety Bureau

enlisted the help of Montana State University to reduce of the incidents of impaired driving among Montana's youth (Linkenbach & Perkins, 2003). The publication of this social norms effort is specifically important to the current study in that it contributed to the body of research on social norms theory and the use of survey data. Researchers effectively demonstrated the methodological collection of data, interpretation of data, and need for the data to be utilized in a way to influence change of perception and behavior. Evidence of the ability to replicate social norms efforts fueled future investigations using social norms interventions including the current study.

Exhibiting continued diligence in clearly outlining their investigation, the results of the Montana study led to intensified insight concerning the usefulness of results produced by surveys in social norms interventions. The depth of conclusions researchers were able to ascertain from survey data influenced the procedures in the current study. Powerful insights were derived from the social norms study in Montana as a result of the survey research including: misperceptions exhibited in university settings across the country were consistent and universal, accurate framing of drinking behavior coupled with exposure of mundane norms is an important prevention strategy, misperceptions function to overestimate high risk behavior while underestimating non-risk taking behavior, while patterns of risk taking behavior and perception of risk taking behavior in men and women differ the pattern of misperceptions transcend gender barriers, young adults who engage in risk taking behavior overestimate the extent to which these behaviors occur and believe that they are engaging in behavior that is typical to their reference group (Linkenbach & Perkins, 2003). These key conclusions serve to advance



the understanding of the existence, impact, and extent of misperceptions and encourage social norms researchers to approach data with a renewed sense of insight.

With mounting data supporting the effectiveness of social norms interventions (Perkins, 2003) researchers again began to develop inquiries that spanned beyond college campus settings and problematic drinking. Researchers sought to expand use of the theory to larger populations and varied public health issues, but because such an all-encompassing model had not been attempted a new model for expanded adaptation had to be developed (Linkenbach, 2003). The efficacious results and reduction in problematic drinking patterns achieved by many college campuses led researchers to believe that social norms interventions held tremendous promise for achieving similar results among young adults and other populations in large scale interventions (Linkenbach, 2003). The prospect of applying a social norms campaign on a macro-level across the state of Montana represented a tremendous advancement in the realm of social norms research.

In response to this need for a new strategy and desire to create a successful state-wide intervention to positively impact the issue of young adult alcohol consumption and driving under the influence the Montana Model of Social Norms Marketing was developed. With support from state agencies in Montana, Linkenbach delineated a seven- step model to combat risky drinking patterns in a groundbreaking effort to advance the application of social norms interventions. The framework for the Montana Model included the data driven methods employed by traditional social norms approaches and methods from the arena of social marketing while accounting for the increased challenges associated with such a large undertaking (Linkenbach, 2003). The

components of the seven-step Montana Model was: planning and environmental advocacy to create a political, economic, and social atmosphere necessary for change in absence of other conflicting prevention efforts, establishment of baseline data, message development that was cohesive, heavily analyzed, and easy to understand, development of a well-designed marketing plan, pilot testing and revised materials, implementation of the campaign, and evaluation of the intervention. There are many useful lessons for future research in the development and structure of the Montana plan that include: the emphasis placed on baseline data, the consistent revision of the strategy based on feedback and effectiveness, the detailed procedure, and diligence in the outcome based evaluation process leading to improved delivery and resulting in longevity for the project.

As a result of the success of social norms interventions in the state of Montana, a tobacco free campaign was launched in the state. Much of our behavior is influenced by our perception of how members of our social groups behave and perceptions are often incorrect (Linkenbach & Perkins, 2003). Such misperception creates a false sense of peer pressure and influence to assimilate that is consistently reinforced through social interaction and media (Linkenbach & Perkins). To combat the harmful effect of misperceptions of social attitude and acceptability of high-risk smoking among young people a social norms media campaign was developed. Researchers were careful to ensure that the information contained in the intervention strategies were relevant and believable to the target group. This consideration is a very important element of the current study; it is necessary to create a message that the target population will consider credible in effort to impart change.

Due to the systematic data collection methods and attention given to the intervention aspect of the Montana Most of Us social norms media campaign it was deemed to be successful in changing adolescent perspective about smoking among their peers. Researchers concluded that this media exposure did translate into more accurate perceptions of peer norms and cessation of high-risk smoking behaviors (Linkenbach & Perkins, 2003). This program represented the first effort to demonstrate a widespread impact of the social norms approach on adolescent tobacco use; a major advancement in the field of prevention and in the arena of social norms research (Linkenbach & Perkins). The promising results laid the foundation for encouraging future research with adolescent populations beyond the study of alcohol consumption.

The increased applicability of social norms theory and the success of interventions aimed at reducing alcohol and substance use among college students created a conversation about use of social norms theory in other arenas. Expansion to middle school and high school populations represented a natural progression for researchers as misperceptions were documented in the literature surrounding prevention efforts with younger subjects (Perkins & Craig, 2003). School administrators were anxious to collect data on their students and join researchers in an effort to understand the impact that perspective and misperceptions have on risky behaviors in secondary and middle school students. Through use of an adaptable web-based survey, researchers gathered up-to-date baseline data about the perspectives of high school students on attitude toward substance use and the extent to which high-risk behavior occurred among their peers. Perkins and Craig (2003) yielding similar results from every school that

participated in the study finding that students consistently overestimated peer substance use and peer attitude toward permissibility of students in their grade level in the same fundamental pattern.

The efforts of these researchers paved the way for the current study through expansion of social norms theory to meet the needs of secondary school students. The approach toward data collection, procedure, and research goals is similar to that of the current study. Many valuable lessons about research conducted at the secondary and middle school level were learned by the investigation conducted by Perkins and Craig (2003) including: high level of participation, the efficient method of surveying students, the consistency of results yielded from investigations speak to the reliability of the this strategy for measuring norms and perceptions, and the broad range of transportability of this strategy across institutions, grade level, and high risk behavior. The aforementioned conclusions contribute to the attainability of meaningful results in future studies using social norms theory and extension of social norms theory into new populations and new high-risk behaviors.

As risky behavior research continued to confirm the widespread participation in harmful substance abuse among adolescents, researchers were prompted to conduct studies with this population using social norms strategies. Literature documents the overestimation of alcohol and substance use among adolescents and the predictive impact that these misperceptions have on alcohol and tobacco use among this population (Berkowitz 2005; Haines, Barker, & Rice, 2003; Linkenbach & Perkins, 2003; Perkins & Craig, 2003). It has also been demonstrated that correcting these misperceptions can

significantly delay the onset of substance use among adolescents through successful interventions including social norms media campaigns (Haines et al., 2003). This demonstrates the promising future of prevention efforts with adolescent populations using the social norms approach to prevention and decrease of risk-taking behaviors.

The study conducted at Northern Illinois University served as a model for a 1998 study at two Midwestern High Schools. Research ensued employing data collection methods about the target population, perceptions, patterns of use, and the existence of healthy behaviors (Haines et al., 2003). After careful planning and analyzing of information gleaned from baseline data collected on the target population, teachers, and parents, current channels of media use, and sources deemed by students to be credible, a social norms marketing campaign was implemented. This intervention was the first effort to include parents and teachers in intervention aimed at reduction of substance use and change in perception among adolescents. Results indicated that the media campaign led to reduction in parents', teachers', and students' overestimation of alcohol and tobacco use among adolescents (Haines et al., 2003). This study presents important advancements in application of social norms theory to the adolescent population and demonstration of efficacy in varied methods of delivery and approaches to conducting research. This study served to further advance the applicability and function of social norms interventions.

As social norms theory grows in popularity and documentation in the literature, many agencies are using tenants of the theory to address social problems. The National Institute for Alcoholism and Alcohol Abuse (2002) compiled a panel of twenty

prevention specialists to evaluate the use of alcohol among college students. Social norms approach was integrated into a comprehensive effort to reduce problematic drinking. The findings of the panel determined social norms theory to be a promising application in managing substance abuse issues in young people.

Misperceptions are closely associated with behaviors making them a critical issue in addressing problematic trends. Several studies in the literature document the predictive nature of misperceptions specifically with high school and middle school students, as well as college student populations. Sher, Bartholow, and Nada (2001) conducted a study with Greek college students. Results concluded that misperceptions predicted problematic drinking patterns in this population (Sher et al., 2001). In a study of 1500 high schools D'Amico et al. (2001) reported that misperceptions about peer drinking patterns predicted drinking patterns in high school students. Berkley-Patton et al. (2003) conducted a study that documented the predictive nature of high school students' perceptions of college drinking patterns. Berkley-Patton et al. (2003) determined that problematic drinking began prior to college. Results stated that targeting social norms interventions toward high school and middle school students would be an appropriate application (Berkley-Patton, 2003). Perkins (2003) conducted a study from the east Coast to the west coast to determine the applicability of social norms interventions to high school students. Results of Perkin's (2003) study revealed that misperceptions predicted drinking in this population.

Social norms approaches have been efficacious in correcting misperceptions associated with belief by individuals that the majority behavior is much different from

their own (pluralistic ignorance), belief that an individual's behavior is like that of peers when in fact it is not (false consensus), and belief that an individual's behavior and beliefs are unlike that of peers (false uniqueness) (Berkowitz, 2005; Berkowitz, 2002). Use of the social norms approach to correct misperceptions in young people serves as a mechanism for circumventing perceived peer pressure through exposure to accurate norms. This makes social norms approach applicable in addressing problem behavior in school systems associated with peer pressure.

Perkins (2003) discussed the causes and consequences of misperceptions. Perkins makes three causal statements related to the existence of misperceptions: the belief that observed behavior of peers is typical behavior and can be associated with what individuals usually do, the tendency to recall the most extreme behaviors, and cultural media that highlights problematic behavior while not acknowledging positive, healthy behavior of the majority. As a result, behavior is driven by misperception (Berkowitz, 2005). Individuals attribute normal behavior to the existence of misperceptions. The behavior and thoughts of individuals are often guided by "imaginary peers" as misperceptions serve to perpetuate problem behaviors as a result of an inaccurate understanding of normalcy (Berkowitz & Perkins, 1986).

In developing social norms interventions it is necessary to consider the types of norms. An important distinction in use of the social norms approach is that the application of interventions in school systems does not refer to issues of public health (Perkins, 2003). In social norms approaches the goal is to acknowledge already existing healthy norms not to correct issues of healthy behavior (Botvin, 2001). Berkowitz

(2002) describes two types of social norms to consider in developing intervention strategies: injunctive or those that are associated with attitudes and deductive or those associated with behaviors. In a study conducted by Botivin (2001) it was concluded that injunctive norms are more predictive of behaviors. In a 2003 publication Perkin's conclusion echoed the aforementioned results that injunctive norms are more pervasive and closely associated with problematic behavior.

The saliency of norms is of critical importance in devising intervention strategies for correcting misperceptions. Berkowitz (2004) and Perkins (2003) stated that misperceptions increase as social distance increases; however the behavior of closely associated peers is more predictive of individual behavior. In considering saliency of norms in intervention development, it is necessary to consider the pervasiveness of global and local norms. Interventions associated with global norms address misperceptions associated with the beliefs of the larger population while interventions associated with local beliefs address the misperceptions associated with closely related peer groups (Berkowitz, 2010). It is possible to devise intervention strategies aimed at both global and local norms (Berkowitz, 2004). It is necessary to be knowledgeable about the nature of norms associated with problematic behavior in order to develop appropriate intervention strategies.

The levels of interventions are also an important consideration in establishing interventions in the social norms approach. Berkowitz (2003) described three levels of intervention: primary or universal, secondary or selective, and tertiary or indicated. In universal prevention strategies, intervention is aimed at the entire community. Strategies



such as social norms campaigns that include elements such as: media campaigns, poster campaigns, and classroom interventions are directed at the entire community to correct misperceptions and reveal accurate social norms associated with problem behavior (Berkowitz, 2010; 2003; 1997). In secondary or selective interventions, interventions are targeted at a specific group. Strategies such as small group discussions and workshops are tailored to meet the needs of the specific group exhibiting problematic behavior associated with perceived social norms (Berkowitz, 1997; 2004). In tertiary intervention social norms approaches can be infused into individual Counseling sessions to target the misperceptions associated with the problem behavior of an individual (Berkowitz, 1997). At this level of intervention it is specifically important to be non-judgmental and to present information about accurate norms in a believable fashion.

Berkley-Patton (2002) revealed information about a study that began in 1996. As part of this universal intervention, campus-wide social media campaigns were aimed at promoting accurate social norms to impact negative drinking patterns in college students. In conjunction with the media campaign, a poster campaign, and classroom interventions were utilized to target misperceptions. The results of this study confirmed the efficacy of universal intervention strategies as the positive reduction in problematic drinking were sustained over a years. Linkenbach (1999) performed a study of social norms interventions associated with problematic smoking patterns in 12-17 year olds over 7 counties. The results of this indicated the useful nature of indicated applications as the results yielded a 41% reduction in smoking. Dimeff, Baerk, Kvilaha, and Marlatt (1999) discussed their work at Washington State University on the 'Alcohol Skills Training

Program.’ This research was efficacious in working with college students to correct misperceptions associated with college drinking patterns. This successful intervention was condensed into the ‘BASCIS’ program, a one hour workshop focusing on the misperceptions of problem drinkers (Dimeff, et al. 1999). This example demonstrates the efficacy of the approach on both selective and indicated levels of prevention.

It is also possible to use an integrated approach to intervention. It is specifically important for the intervention strategies to be cohesive and consistent across levels (Berkowitz, 1997; Perkins, 2003). Botvin et al. (2001) applied an intervention strategy to a minority group in an inner-city public school system to meet the needs of at-risk youth. The same strategy had proved efficacious in application with white middle class students. The strategy involved school-wide intervention, small group discussion and workshops with the most at-risk groups, and individual counseling with students who exhibited the most problematic drinking patterns (Botvin et al.). Botvin et al. reported results that yielded sustained reduction in drinking patterns that continued for many years. This integrated approach proved to be efficacious in combating the misperceptions of drinking patterns of young people in the school system.

LaBrie, Hummer, Neighbors, Larimer (2010) investigated the relationship between perceived injunctive norms, peer approval of drinking behaviors in specific situations, with encountering alcohol-related consequences based on the level of social group similarity between students. Through use of an online survey with 3,753 participants from two universities the impact of social norms was investigated. Findings, controlled for demographic variables that included race, gender, and Greek status, and

demonstrated the impact that individual perception of peer attitudes and behavior had on the behavior of individuals who participated in the study. This study revealed the predictive nature that perceived norms of students, parents and close friends have on individual attitude and behavior (LaBrie et al., 2010). Using alcohol-related consequences as the outcome variable to evaluate the influence of injunctive norms, these results suggest that perceived injunctive norms play an important role in experiencing consequences and implicate the type of feedback that would be most successful when incorporated into social norms strategies (LaBrie et al).

Continuing in the vein of consequence research, Turner et al. (2008) conducted a study on a college campus to monitor the effectiveness of social norms campaigns on problematic drinking and subsequent consequences. Turner et al. discussed promising results from the social norms campaign with undergraduate students reported that alcohol-related consequences decreased by 113% with the chances of experiencing multiple alcohol-related consequences decreasing by 57%. First year students specifically reported a 22% reduction in chance that they would experience multiple negative consequences (Turner et al.). The study executed by Turner et al. yielded finding with profound implications for the improvement of holistic wellness in this student population of 12,500 and the percentage of decreasing consequences: considering an undergraduate population of 12,500 and the decreasing negative consequences occurring among students: 1,972 fewer students were injured by alcohol-related events, 1,511 fewer drove under the influence, 553 fewer engaged in unprotected sex, and 2,480 more students reported no negative alcohol-related consequences in 2006 versus 2001.

These results reflect stark differences in national data about alcohol-related consequences during the same time period indicating that use of social norms theory has a profound impact on unhealthy and problematic behavior patterns in college populations (Turner et al.).

Berkowitz (2002) expanded the application of social norms theory to use with violent sexual offenses against women. In his study he found that most men are uncomfortable with violence towards women, but do not vocalize their objections (Berkowitz). Without being challenged sexual offenders are unaware of the accurate social norms concerning their behavior. Results of Berkowitz's study revealed that social norms approaches are useful in application with this population in challenging misperceptions and revealing normative data concerning the rest of the population. Continued expansion of the social norms approach can lead to social progress and decreases in social problems that plague or society.

Berkowitz (2010) built on the belief that social norms theory is a viable strategy to prevent violence against women. Successful social norm programs have been developed for prevention and promising interventions have been executed for sexual violence and other social issues (Berkowitz). The work called for future research and application of social norms as a prevention tool to reduce the occurrences of sexual violence against women and children through community-based norm correction strategies (Berkowitz).

In the spirit of expanding the application of social norms theory, Gino, Ayal, and Ariely (2009) examined the impact of social norms on ethical behaviors in research

studies conducted at Carnegie Melon University with 141 students. The researchers employed social norms theory to investigate academic integrity and dishonesty among the students who participated in the study (Gino et al., 2009). Results from the first of their two experiments indicated that social norms and social group identification have a large impact on dishonesty (Gino et al.). Overall results indicated that the students' reaction to unethical behaviors of others is dependent on the implied social norms and on the saliency of dishonesty (Gino et al.). Findings suggest that peer influence is an important factor in ethical and honest behavior indicating that the impact of social norms on problem behavior is being found to be consistent (Gino et al.).

Over the past decade, literature has documented a significant change in American youth, their behavior, and their attitude toward risk taking (Stevens & Griffin, 2001). With traditional prevention efforts yielding less than promising results, researchers have worked to answer the call for needed prevention and intervention efforts with this population of risk-takers. This changing population of adolescents and differing mindset toward risky behavior merits new prevention techniques that shift focus from explanation of consequence and focus on the negative impact of risk taking behaviors. In support of this modification in the field of prevention, Gardner and Steinberg (2005) argued that it is not a lack of reasoning skills or understanding of consequences and reasoning skills that prompts risky behavior in adolescents as their research supported the notion that adolescents have ability to comprehend the impact of risky behavior that parallels that of adults. This notion impacts the direction of prevention efforts and research surrounding adolescent motivation toward risk taking behaviors.

While gender disparities do exist in the literature surrounding unhealthy risk-taking behavior, male and female adolescents do tend to engage in the same problem behaviors (Stevens & Griffin, 2001). Research shows that both adolescent males and females engage in multiple high-risk behaviors, however the onset and frequency of the behavior exhibit some differences in accordance with gender. Girls often exhibit participation in risk taking behavior at a high rate than that of their male counterparts (Stevens & Griffin). Given this knowledge, researchers know that intervention strategies should be equally relevant to male and female participants.

In response to the alarming unhealthy risk taking behavior present in the adolescent population of both male and female students, the Center for Disease Control and Prevention developed the Youth Risk Behavior Surveillance System to monitor six high-risk behaviors in young people. The behaviors are investigated and parsed for race, ethnicity, age, geographic location, and a multitude of other variables and include: behaviors that contribute unintentionally to injuries and violence, tobacco use, sexual risk taking behavior, unhealthy dietary habits, and physical inactivity (Center for Disease control and Prevention, 2010).

The literature documents risk factors and environmental factors that contribute to adolescent risk taking behavior. The National Survey on Drug Use and Health (2008) contained several questions for young people age 12-17 about risk and protective factors that may impact their use of substance abuse. The impact of peer influence is interwoven in the risk factor literature and into much of the research surrounding adolescent risk behavior and is of specific importance to the current study. According to the 2008

National Survey on Drug Use and Health documented that a majority of youth age 12-17 reported that they strongly disapproved of their peers using substance use. Central to social norms theory is the influence that perceived norms of peer behavior have on predicting individual behavior (Perkins & Craig, 2006). The impact that these misperceptions have on individuals have been well documented in the social norms literature.

Social norms based interventions work to counteract the misperceptions that adolescents have toward risk-taking behavior in effort to offer accurate information about peer behavior and attitudes toward problem behaviors. Employing a variety of strategies to positively impact an increasingly diverse grouping of social problems, social norms theory has consistently returned efficacious results. This gives promise to future studies and prevention efforts using the social norms theory as a strategy to successfully intervene in risk-taking behavior.

### **Social Norms and Attitudes Toward Help-Seeking**

Mental health issues present and increasing problem on college campuses, however much of the research suggests that only a small percentage of individuals who could benefit from mental health services actually pursue psychological help (Vogel et al., 2006). Even with reported rises in psychological issues and in help seeking (Gallagher, 2010) studies suggest that untreated mental health issues are highly prevalent in the college population (Hunt & Eisenberg, 2010). The American College Health Association National College Health Assessment (2011) found that students with mental health diagnosis, such as depression, still avoided seeking treatment while Blanco et al.

(2003) found low treatment rates across psychiatric disorders. The lack of motivation for psychological help seeking indicates that the severity and pervasiveness of mental health issues will continue to challenge young people as they emerge into adulthood (Hunt & Eisenberg, 2010). The continuity in findings across studies present significant concerns for university administrators and mental health professionals as the encouragement to participate in health promoting behaviors continues to be a priority on campuses across the country.

The root of negative attitudes toward help seeking in college students can be attributed to a number of barriers, however the influence of peers and peer perception presents one of the most difficult challenges. Peer influence is one of the biggest determinants of college student behavior (LaBrie et al., 2009). Individual's attitudes and behavior are heavily influenced by the beliefs individuals hold regarding their social group's attitudes and behaviors (Perkins, 2003; LaBrie et al., 2009). As a result, many people who could benefit from mental health treatment and services choose not to obtain them despite evidence of improved quality and effectiveness of mental health treatments (Corrigan, 2004).

Social norms have been cited in the literature as barrier to help seeking and a potential avoidance factor (Vogel et al., 2007b). Literature suggests that the attitudes that an individual's family and friends express plays an influential role in response to mental health problems (Vogel et al., 2005). Having a social support system that encourages help seeking for a problem is a necessary element in encouraging individuals to seek mental health treatment as research shows that individuals generally talk to family



members and friends prior to pursuing professional help (Vogel et al., 2007b). Vogel et al. (2005) reported that people reported greater intent to seek Counseling services when their support system accepted the action. Literature reflects the role that social norms have on the help seeking process, however more research is necessary to determine the degree to social norms impact distressed individuals' decisions to seek professional help (Vogel et al., 2007b). Attitudes toward help seeking are impacted by misperception (Vogel, Wade, & Hackler, 2008). This lends itself to the need to further explore individual attitudes on help seeking and individuals' perspective of their peers' attitudes toward help seeking so that interventions and wellness campaigns can provide normative feedback to enhance motivation to engage in mental health services.

In order to conduct meaningful research on attitudes toward help seeking and to reach distressed individuals in need of services, the field of mental health needs to gain a more comprehensive understanding of the factors that influence individual's decisions to seek help (Shaffer, P.H., Vogel, D.L., Wei, M., 2006). There is a notable rise in distress in the college student population, but individuals are still reluctant to engage in psychological services (Shaffer et al., 2006). The source of this disconnect between distress and seeking professional help must be understood in order to encourage students to participate in Counseling and mental health treatment (Corrigan, 2004). Despite clinical research with evidence-based guidelines that support treatments that will improve the quality of individuals lives (Corrigan, 2004) two thirds of people who could benefit from treatment do not seek out mental health services (Vogel et al., 2006).

Literature suggests many factors associated with anticipated risks and benefits that contribute to individuals' attitudes toward help seeking (Vogel et al., 2008). Participation in counseling is linked with the anticipated risk of dangers of opening up to another person while the anticipated benefit of therapy has been defined A as the perceived usefulness of seeking professional mental health services (Vogel et al., 2008). Vogel et al. (2006) found that college students perceive counseling as offering fewer benefits than risks necessitating counselors and mental health professionals to work directly to change individuals' perceptions of counseling services. Those who engage in counseling must believe that counselors are a source of help and support (Lopez et al., 1998). Through emphasis on the benefits of counseling, students may begin to change their attitudes toward counseling (Vogel et al., 2006) in turn positively impacting the social norms related to mental health services.

Mental health professionals understand that in order to encourage distressed individuals to receive mental health services they must work to breakdown the barriers and obstacles that promote avoidance of seeking professional help (Vogel et al., 2007a). Social influence plays a fundamental role in the way that barriers to Counseling are shaped (Corrigan, 2004; Vogel et al., 2008). Similarly, research suggests that people close to individuals' play a fundamental role in their decision to seek professional help (Vogel et al., 2007a). Course of behavior and choices are usually in accordance with the directives of references groups that are important to individuals as strong tendency to conform is consistently documented in social surveys (Perkins, 2002). People tend to adopt the beliefs and attitudes of their social groups as reference group norms are

acquired (Perkins). Perceived attitudes of social groups surrounding professional psychological services are often associated with negative stigma making individuals avoidant of mental health services (Vogel et al., 2007a).

Stigma is defined as mark or flaw that is viewed as socially unacceptable (Vogel et al., 2007a). Mental health stigma can be defined as objectifying or dehumanizing a person who is categorized as mentally ill (Masuda, Price, Anderson, Schmertz, & Calamaras, 2009). Stigma associated with mental health services is perceived as undesirable or socially unacceptable (Vogel et al., 2006) contributing to individuals' lack of motivation to seek treatment for psychological distress (Corrigan, 2004). Stigmatizing attitudes of students about mental illness can be associated with lower help seeking behavior (Hunt & Eisenberg, 2010). Researchers have concluded that it is not just the presence of a mental health disorder, but the act of seeking professional help for mental health issues that contributes to stigma (Vogel et al., 2007a). Stigma impacts the underutilization of mental health treatment (Masuda, et al., 2009).

Stigma is the most cited reason that people do not seek professional psychological help (Corrigan, 2004). Two types of stigma are presented in the literature: public stigma and self-stigma (Vogel et al., 2006). Public-stigma is defined as the perception held by a group or society concerning unacceptable attributes of a person that may lead to negative reactions and social undesirability (Vogel et al., 2006; Vogel et al., 2007a). Public stigma associated with mental health is connected to negative attitudes toward mental health services (Vogel et al., 2005). "The direct relationship of perceived public stigma on one's willingness to seek professional help is well established" (Vogel et al., 2007a, p.

41). Corrigan (2004) states that label avoidance as a reason that individuals often do not seek mental health services resulting from public stigma. Self-stigma is reduction in an individual's self worth through self-labeling himself or herself as someone who is not socially desirable (Vogel et al., 2006; Vogel et al., 2007a). Understanding the effects of public stigma and self-stigma will likely produce important advancements in motivating individuals to seek professional psychological help for distressing impairments (Corrigan, 2004; Vogel et al., 2007a).

If counselors wish to reach those in need of mental health services, it is first necessary that the professional address personal attitudes of individuals towards counseling (Vogel et al., 2005). Future research must work to more fully understand how public stigma and self-stigma related to attitudes toward help seeking and the participation in mental health treatment and services (Vogel et al., 2007a). Further investigation on the impact of stigma on attitudes toward help seeking (Vogel et al., 2007a) and the role of social networks on attitudes toward help seeking (Vogel et al., 2007c) are necessary in order to develop effective programming to combat mental health issues on college campuses. Programs based on holistic public health that view mental health as a fundamental element in the well-being of students are needed (Hunt & Eisenberg, 2010).

### **Conclusions**

It is important that the application of social norms theory continue to be expanded. There are many pervasive issues that are impacting the wellness and social development of young people. Through use of social norms theory to combat social

issues, mental health, and comprehensive wellness in university settings university officials and counselors prevention efforts hold the promise of positively impacting the problem behavior of America's adolescents and young adults.

There are some important elements to implementing social norms interventions. Alan Berkowitz, a consultant and one of the main proponents of social norms theory made several recommendations for implementing social norms interventions. Berkowitz (2005) recommended that steps to successful social norms applications include: collecting data about actual norms, understanding the saliency of norms, determining the appropriate outlet for communicating accurate norms, ensuring proper exposure to normative messages, and evaluating the results of the intervention. Johannessen (2003) recommends that key stakeholders are well-informed about the normative perspectives, approach, that consultants and other professionals implementing the approach are not intimidating by challenging beliefs about misperceptions or beliefs of the stakeholders, that the messages concerning accurate norms and misperceptions are palatable, and that messages are presented in a believable fashion. Implementing a successful intervention using the social norms approach necessitates fully understanding the perspectives of individuals in the population, understanding the importance of thoughtful and strategic planning and knowledge of the steps necessary to execute interventions with target populations.

Social norms intervention and prevention efforts begin with an understanding of the perspectives and attitudes of the population of interest. Researchers levels of understanding of the social barriers and avoidance of help seeking among college

students has increased however there is lack of empirical evidence about the impact that campus policies, resources, and strategies have on attitudes toward help seeking (Hunt & Eisenberg, 2010). Increasing our understanding for student perspective on help seeking enables researchers and college personnel to develop outcome based programming to enhance students' participation in mental health services

The challenges and criticisms associated with the social norms approach usually surface on the heels of unsuccessful interventions. It is important for consultants, counselors, and intervention and prevention specialists to understand that unsuccessful social norms campaigns are more likely attributed to the application of the theory rather than the content of the theory itself (Berkowitz, 2003). Berkowitz (2003) and Perkins (2003) noted that critics of the social norm theory hold the application to a very high standard; an arguably higher standard than what is used for evaluating other approaches resulting in some of the criticism experienced. Some typical challenges associated with unsuccessful social norms efforts include: inadequate exposure to the normative message, inappropriate strategy for application, misinformation about the saliency of norms and accurate norm data, difficulty with collection of data, and difficulty with interpretation of results (Berkowitz, 2002).

The efficacy of social norms theory use with college populations and problematic drinking patterns is well-documented in the literature. The literature documents more than 45 studies documenting the applicability of social norms approach in predicting problem behaviors; 8 documenting alcohol use with high school students and middle school students and 5 documenting tobacco use with high school and middle school

students. The expansion in its application to other populations and social issues among college students is building popularity. In recent years, social norms theory has been successfully applied to high school and middle school students to combat perceived norms associate with alcohol, drug use, and tobacco (Perkins, 2003; Berkowitz, 2004). The application of social norms theory to a broader spectrum of health issues is emerging in popularity as usefulness of the social norms theory in combating issues outside of drugs and alcohol becomes more apparent. Traditional intervention strategies focus on problematic behavior. Social norms theory aims to acknowledge the existence of healthy norms in order to reveal misperceptions associated with problem behaviors. With continued application of the theory its use will continue to be expanded.

### Chapter 3: Methodology

The purpose of this study was to examine whether or not statistically significant mean differences existed among college students attitudes and their perception of their peers' attitudes toward help seeking behavior. The study further sought to determine whether or not statistically significant mean differences existed between male and female college students' attitudes and perception of their peers' attitudes toward help seeking behavior. The current study investigated the social norms surrounding college students' attitudes toward help seeking and their perception of peer attitudes toward help seeking in order to gain insight into the attitudes and perceptions of this population. This study was conducted as part of an effort to advance knowledge about social norms, mental health, and college students in order to develop effective programming to stimulate mental health and wellness among the college population. This study serves to advance the body of literature on social norms theory by providing descriptive research about college students' attitudes toward professional mental health treatment and services and their attitude toward the extent to which these behaviors occur. This information will provide normative feedback to serve as a foundation for future social norms strategies to positively impact campus mental health. The current study investigated individual attitudes toward help seeking behavior as well as individuals' perception of peer attitudes toward help seeking behavior.

This study investigated the correlation or association between attitudes toward helping behavior and peer perspective on helping behavior, comparable because they are measured in the current study as a within group factor. The study will also examine the



role that gender plays in individual attitudes toward help seeking behavior in Ohio University undergraduate students through use of repeated measures analysis of variance. This chapter describes the process for implementing the research study, acquiring data, and the method of analysis. A discussion of the IRB approval, sampling procedure, population, research design, independent and dependent variables, null hypothesis, and data collection and analysis procedures are included in this chapter.

The statistical package that was used to perform the data analysis in the current study was the Statistical Package for Social Sciences (SPSS). SPSS is a widely utilized and highly respected program for analysis of data collected from research in the realm of social science (Coolidge, 2006). SPSS was utilized to test the hypothesis and conduct the analysis necessary to complete the research study.

### **IRB Approval**

Ohio University mandates that any student or faculty member conducting research using human participants acquire approval from the Institutional Review Board (IRB). The review ensures that participants are operating on their own free will, will withstand no harm, and are being treated with respect. As this study does not involve minors, labeled through the IRB as a particularly vulnerable group, special guidelines are not anticipated. Following the proposal process, the researcher began the process to gain IRB approval for the research study by submitting the proposal and an outline of the IRB required information. The researcher attained IRB approval for the current study.

## Sample

The unit of analysis for this study will be Ohio University undergraduate students. The population under investigation is undergraduate students in the College of Health Sciences and Professions and the Patton College of Education and who were enrolled in courses in fall semester of the 2012-2013 academic year. The researcher was granted access to classrooms as several professors were willing to make their classes available for survey distribution for the purposes of the current study. The number of students required for this study was approximately 200 subjects, determined by the G\*Power program. The pool of available students was over 200 based on the enrollment in courses that the researcher had access to for the current study. The pool of students was a larger number to allow for invalid questionnaires and other issues involving the collection of data.

The present study utilized a convenience sampling strategy as the researcher utilized accessible students based on permission granted from professors. A convenience sample is defined by Fraenkel and Wallen (2000) as a “group of individuals who are available for a study and able to be accessed by the researcher in a convenient manner” (p.96). “The advantage to this sampling method is that it makes attaining participants for researcher a manageable task” (Fraenkel & Wallen, 2000, p.96). However, there are disadvantages to this approach that include: risk of attaining a bias sample as all Ohio University students not having an equal chance at being selected for the study and convenience sampling cannot therefore be considered representative of the population (Fraenkel & Wallen).

The participants were accessed during class time at the Ohio University via permission from their professors. While the students received and sign a copy of the informed consent form, they were not asked to provide any identifying information such as names, emails, or university identification numbers during the survey administration to protect the anonymity of the respondents. SPSS later assigned identification numbers to the each survey as a means to organize the data, however the identification of the person had nothing to do with how identification numbers were derived by the software system. The goal of the study was to assess participants' responses in order to attain descriptive statistics.

The choice to work with college students was made in part as a result of adjustment difficulties and mental health issues being a significant public health concern as mental health issues among college students become increasingly prevalent (Lee et al., 2009). Research indicates that “college freshman and undergraduate students are among the subgroups most likely to experience personal, social, and academic adjustment difficulties” (Lee et al, 2009, p. 375) as major causes of attrition in first year college students result from emotional factors (Pritchard & Wilson, 2003). “Mental health and emotional issues are a strong predictor of student success during the undergraduate years of college” (Pritchard & Wilson, 2003, p.18). College student personnel professionals and mental health professionals on college campuses need to address threats to academic performance and retention during the first year of college through intervention strategies that need to be based on the mental health needs of the student body (Pritchard & Wilson).

## **Instrumentation**

All participants were given a three part questionnaire: Inventory of Attitudes Toward Seeking Mental Health Services, an adapted version of Inventory of Attitudes Toward Seeking Mental Health Services that asked participants to answer questions based on their perception of how their peers would answer, and a demographic survey. It has been noted that no permission is necessary to use the assessment tool as the author and publisher allow this instrument to be freely applied to research endeavors. The demographic part of the questionnaire was a series of questions to gather information about participants such as age, gender, race, degree program, and grade level. With use of a convenience sample, demographic information is an important element of data collection for the purposes of generalizability of results and replication of the study (Fraenkel & Wallen, 2000). The demographic data, specifically gender was utilized to analyze the data and gain useful inferences about the perceptions of participants based on individual characteristics.

The Inventory of Attitudes Towards Seeking Mental Health Services (IASMS; Mackenzie, C.S., Knox, V.J., Gekoski, W.L., & Macaulay, H.L., 2004, see Appendix B) is a 24-item questionnaire that measures attitudes toward seeking professional psychological help. Items are worded in the form of definitive statements and ask participants to answer based on a five point Likert scale rating 0 (disagree) to 4 (agree). Upon rigorous scrutiny of the item loadings Mackenzie et al. (2004) labeled three factors: psychological openness, help-seeking propensity, and indifference to stigma. The psychological openness subscale scores seek to measure the extent to which individuals

are open to acknowledging that they have a psychological problem and to the possibility of seeking mental health services or psychological help for such issues (Mackenzie et al., 2004). An example of an item on the questionnaire designed to measure the subjective norms that met inclusion criteria on the factor, psychological openness is: “People with strong characters can get over psychological problems by themselves and would have little need for professional help.” The help-seeking propensity subscale scores measure the extent to which individuals believe that they are willing and able to seeking professional psychological help (Mackenzie et al., 2004). Help-seeking propensity is evaluated through items like, “I would want to get professional help if I were worried or upset for a long time.” Lastly, scores on the indifference to stigma subscale reflect the extent to which individuals are concerned about what others who are of value or importance in their lives may think if they knew that the individual was seeking professional help for psychological problems (Mackenzie et al., 2004). Subjective norms associated with indifference to stigma are reflected in items including, “I would be embarrassed if my neighbor saw me going into the office of a professional who deals with psychological problems.”

The inspection of item loadings performed by Mackenzie et al. (2004) led to the factor labels: psychological openness, help-seeking propensity, and indifference to stigma. Mackenzie et al. (2004) recoded all the negatively worded items so that higher scores represent more positive attitudes. The extent to which items are internally consistent was measured using Cronbach’s alpha with internal consistency for the entire measure, IASMHS, equaling .87 (Mackenzie et al. 2004). Alpha was .82 for the

psychological openness scale, .76 for the help-seeking propensity scale, and .79 for the indifference to stigma subscale (Mackenzie et al., 2004). The research completed by Mackenzie et al. (2004) found the three factors to be positively correlated with one another.

The development of the scale used for the current study was based on, The Attitudes Toward Seeking Professional Psychological Help scale (Turner & Fischer, 1970) which was created for use in research settings. The scale consists of 29 items with the following four subscales: Factor 1 - recognition of personal need for professional help, Factor 2 - tolerance of stigma associated with professional psychological help, Factor 3 - interpersonal openness, and Factor 4 - confidence in mental health professionals. Responses are recorded on a 4 point Likert scale with high scores indicating positive attitudes toward professional help. Scores are calculated for each subscale as well as the total scores.

The Attitude Toward Seeking Professional Psychological Help Scale was found to be useful in distinguishing positive and negative attitudes toward help seeking (Fischer & Farina, 1995; Fischer & Turner, 1970). The scale was standardized and developed using a sample of college students with varying backgrounds (Fischer & Turner, 1970) making it an ideal instrument for the current study. Fischer and Turner (1970) reported reliabilities for each factor: Factor 1: Need ( $r = 0.67$ ), Factor 2: Stigma ( $r = 0.70$ ), Factor 3: Openness ( $r = 0.62$ ), Factor 4: Confidence ( $r = 0.74$ ). Based on the aforementioned fact, the scale is deemed to be appropriate in content and reading level for the unit of analysis for the present study. The internal consistency and reliability of this scale is well

supported by the literature (Vogel, Wester, Wei, & Boyson, 2004). Fischer and Turner (1970) were able to support the construct validity of the Attitudes Toward Seeking Professional Psychological Help Scale as it correlated positively and significantly ( $r = 0.49$ ) with the Help-Seeking Attitude scale.

Mackenzie et al. (2004) developed the Inventory of Attitudes Toward Seeking Mental Health Services through adapting the Attitudes Toward Seeking Professional Psychological Help Seeking. The authors found methodological concerns regarding the standardization sample, the nature of the factor structure, the four-factor subscale, and the four point rating scale. The standardization sample used to develop Fischer and Turner's (1970) was based entirely on college students, a population of people who demonstrate underuse of mental health services (Hunt & Eisenberg, 2010). Adaptations were made from the four-factor subscale to the five-factor subscale and included word and item changes.

### **Group Administered Survey Research**

Survey research is an effective way to ask questions to a large group of people in order to gain insight into the characteristics of specific populations (Fraenkel & Wallen, 2000). Group Administered surveys are a specific method of survey research necessitating the awareness of specific issues in order to successfully conduct research. Dillman (2000) discusses the importance of recognizing independent influences that impact responses not present in other types of self-administered survey settings. Providing participants with a simple introduction message informing them of how to proceed to the survey and preemptively answering questions may be a benefit as

questions asked by participants may influence the perspective and item answers of other participants (Dillman). Avoiding a situation when the professor gives the research survey at the end of class and then allows the participants to leave upon completion is a recommendation as hasty and careless responses may be prompted by a desire to leave (Dillman). Giving a survey in a group setting in a classroom may invoke test taking behaviors and feelings in participants causing them to utilize test taking strategy and emotions that may sway their responses (Dillman). Keeping administration simple through prepared introductory comments and instruction may help to diffuse the test taking anxiety and desire to preview and review questions as well as working to eliminate some of the intangible issues associated with group survey administration (Dillman). Discouraging of questions and group discussion prior to survey administration is recommended while encouraging of questions following survey administration is promoted (Dillman).

Dillman (2000) gives a general protocol for group administration of questionnaires displayed in Table 1. Five steps, from introduction through debriefing are outlined in a useful and understandable format. Dillman makes recommendations such as: simple introduction, distribution of the materials in a sealed envelope with the inclusion of a cover letter allows for subjects to begin answering items any time after they receive the packet and complete the informed consent form promoting a more relaxed environment and diffusing test taking behaviors, asking participants to return the questionnaires in the sealed envelope reassures the nature of confidentiality ensuring that other participants do not see the item answers of other respondents, and making request



for the participants to wait for additional instruction avoids incentivizing quick responses as participants desire to leave quickly and also gives the administrator time to answer questions, provide explanation of the purpose of the questionnaire, and to debrief the participants. Table 3.2, represented as Figure 7.2 in Dillman page 255, displays an organized guide to group administration of questionnaires in a systematic way.

Table 3.1 Group Survey Administration Dillman (2000)

**Example of a Protocol for Group Administration of Self-Administered Questionnaire**

**Introduction:** A nearly identical introduction is provided to all groups consisting of these elements:

An expression of appreciation for what they are about to do.

A brief description of the task (completing questionnaire) and what it is about in a limited way (nearly the same as explained in the cover letter.

Summary of the steps: (which may be posted on blackboard or poster board as well):

- ◆ Read the cover letter
- ◆ Take the questionnaire out of the envelope
- ◆ Complete the questionnaire
- ◆ Immediately put it in the envelope and seal it for sending to the processing office. This is part of making sure your answers are

Table 3.1 Continued

confidential. None of us in this room will see you individual responses (aside from the researcher that will be unable to determine the identity of the respondent.)

***Special Instructions:***

These special instructions are typically offered:

This is not a test with right or wrong answers.

Please think of it as being a questionnaire sent to your apartment or home and fill it out just like you would if we sent it there.

As soon as you have answered the last question, please be sure that you put the questionnaire immediately into the envelope, seal it, and wait for additional instructions.

***Distribution:***

Each respondent is given a packet consisting of the questionnaires inside a sealed envelope, which will double as a return envelope, and a cover letter clipped to the front of the envelope.

They are told they can start when they receive it.

***Retrieval:***

Questionnaires are passed in when everyone is done or picked up from where each respondent is sitting.

Table 3.1 Continued

<b><i>Debriefing:</i></b>	More information about the questionnaire and its purpose may be provided. Appreciation is expressed once again to respondents. Whatever question people have are answered as fully as possible.
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### **Procedure**

The researcher corresponded with the Ohio University professors to choose dates and times to administer the questionnaires in their undergraduate classes ensuring that their approximately 200 students to ensure that the appropriate number of respondents can be accessed. After the dates and times had been set the researcher prepared 500 copies of the informed consent form. One was signed by each participant and retained by the researcher and the other one that each participant took with them. The researcher also prepare sealed envelopes for each participant that included a cover letter clipped to the outside of the envelope, the Inventory of Attitudes Toward Seeking Mental Health Services, the adapted form of the Inventory of Attitudes Toward Seeing Mental Health Services, the demographic questions, and the debriefing document. Dillman (2000) recommends giving group administered questionnaires and subsequent information to participants in a sealed envelope to help distinguish the study questionnaires from academic tests and to diffuse the anxiety and emotions associated with test taking. Use of

envelopes are also helpful to reassure the participants that their confidentiality will be preserved and is of utmost priority to the researcher (Dillman).

In preparing to enter the classroom, the researcher prepared a thorough and concise introduction. By preparing this statement in advance, the researcher ensured that each group is provided with a consistent introduction and coherent information about the study. The introduction included: expressing gratitude for participation in the study, a brief description of the task, and a summary of the steps that the participants will be asked to follow (Dillman, 2000). The researcher utilized a visual display of the steps in order to aid the participants in following the precise actions required by the researcher as well as promoting uniformity between group administrations. The steps on the poster board included: read the cover letter, take the questionnaire out of the envelope, complete the questionnaires, and immediately put them in the envelope and seal it (Dillman). The researcher explained that questions and comments will be welcomed following every participants' completion of the questionnaires ensuring that the respondents are aware that quickly answering the questionnaire will not allow them to leave the classroom and insinuating that comments prior to administration of the survey are not appropriate (Dillman).

All of these elements of planning helped the researcher to provide uniformity between group administrations while also providing a good environment for the students to complete the questionnaires. By giving the respondents a comfortable and structured atmosphere to complete the questionnaires, the researcher will have a better chance of collecting data that is representative of the respondents' perspectives in absence of

independent influences (Dillman, 2000). After distributing a packet to each participant the researcher instructed participants to begin completing the questionnaires as they received them. When the respondents were finished with the questionnaire, the researcher instructed them to return the questionnaire to the envelope and seal it, and the researcher picked up the packets from where each participant was sitting. The researcher provided the respondents with more information about the questionnaire and its purpose following the collection of all of the envelopes. The participants were then allowed to ask the researcher questions that were subsequently answered as fully as possible (Dillman). The researcher expressed appreciation to each participant and exited the classroom.

The Statistical Package for Social Sciences (SPSS) was utilized to give the respondents identification numbers that will further confirm anonymity of the participants. SPSS was utilized to organize the data, scrub the data, and perform the statistical analysis. The researcher also performed four checks of the data to ensure that no errors were made when entering in the data. SPSS was used to test the null hypothesis that there was no effect and produced the F statistic.

### **Variables**

The current study utilized one independent variable: gender and one dependent variables: attitudes toward help seeking and peer perspective on attitudes toward help seeking. For the purposes of this study and analysis, the independent variable is considered a between group variable with two levels, male and female. For analytical purposes, the dependent variables are within factors and are treated as a single measure of

attitude taken on one group of persons on two occasions. The dependent variables were operationalized through use of the Attitudes Toward Professional Psychological Help Seeking Scale and adapted version of the Attitudes Toward Professional Help Seeking Scale. As the two variables were measured with essentially the same items, they were commensurate or directly comparable.

### **Research Questions**

This study addressed the following research questions:

1. Are there statistically significant mean differences among college students' attitudes and perceptions of their peers' toward mental health help seeking behavior (as measured by total scores on the Inventory of Attitudes Toward Seeking Mental Health Services)
  - a. Are there statistically significant mean differences among college students' attitudes and perceptions of their peers' toward mental health help seeking behavior (as measured by subscale Psychological openness on the Inventory of Attitudes Toward Seeking Mental Health Services)?
  - b. Are there statistically significant mean differences among college students' attitudes and perceptions of their peers' toward mental health help seeking behavior (as measured by subscale help-seeking propensity on the Inventory of Attitudes Toward Seeking Mental Health Services)?

- c. Are there statistically significant mean differences among college students' attitudes and perception of their peers' toward mental health help seeking behavior (as measured by subscale indifference to stigma on the Inventory of Attitudes Toward Seeking Mental Health Services)?
2. Are there statistically significant mean differences among male and female college students' attitudes and perception of their peers' attitudes toward mental health help seeking behavior (as measured by total scores on the Inventory of Attitudes Toward Seeking Mental Health Services)?
    - a. Are there statistically significant mean differences among male and female college students' attitudes and perception of peers' attitudes toward mental health help seeking behavior (as measured by subscale psychological openness on the Inventory of Attitudes Toward Seeking Mental Health Services)?
    - b. Are there statistically significant mean differences among male and female college students' attitudes and perception of peers' attitudes toward mental health help seeking behavior (as measured by subscale help-seeking propensity on the Inventory of Attitudes Toward Seeking Mental Health Services)?
    - c. Are there statistically significant mean differences among male and female college students' attitudes and perception of peers' attitudes toward mental health help seeking behavior (as measured by

subscale indifference to stigma on the Inventory of Attitudes Toward Seeking Mental Health Services)?

### **Null Hypothesis**

The current study will address the following null hypotheses:

1. There are no statistically significant mean differences among college students' attitudes and perception of their peers' attitudes toward mental health help seeking behavior (as measured by the total scores on the Inventory of Attitudes Toward Seeking Mental Health Services).
  - a. There are no statistically significant mean differences among college students' attitudes and perception of their peers' attitudes toward mental health help seeking behavior (as measured by subscale psychological openness on the Inventory of Attitudes Toward Seeking Mental Health Services).
  - b. There are no statistically significant mean differences among college students' attitudes and perception of their peers' attitudes toward mental health help seeking behavior (as measured by the subscale help-seeking propensity on the Inventory of Attitudes Toward Seeking Mental Health Services).
  - c. There are no statistically significant mean differences among college students' attitudes and perception of their peers' attitudes toward mental health help seeking behavior (as measured by the subscale



indifference to stigma on the Inventory of Attitudes Toward Seeking Mental Health Services).

2. There are no statistically significant mean differences among male and female college students' attitudes and perception of their peers' attitudes toward mental health help seeking behavior (as measured by total scores on the Inventory of Attitudes Toward Seeking Mental Health Services).
  - a. There are no statistically significant mean differences among male and female college students' attitudes and perception of their peers' attitudes toward mental health help seeking behavior (as measured by subscale psychological openness on the Inventory of Attitudes Toward Seeking Mental Health Services).
  - b. There are no statistically significant mean differences among male and female college students' attitudes and perception of their peers' attitudes toward mental health help seeking behavior (as measured by subscale help-seeking propensity on the Inventory of Attitudes Toward Seeking Mental Health Services).
  - c. There are no statistically significant mean differences among male and female college students' attitudes and perception of their peers' attitudes toward mental health help seeking behavior (as measured by subscale indifference to stigma on the Inventory of Attitudes Toward Seeking Mental Health Services).

The null hypotheses were developed based on the procedural strategy and the dependent and independent variable interaction.

### **Analysis**

The method of analysis chosen to test the null hypothesis in the study is a two-way analysis of variance (ANOVA) with a between and within factor. The within-subjects factors involve comparison of the same subjects under different conditions (Lane, 2012). The Repeated Measure ANOVA is used when there are between and within factors in the data as there are in the present study. Analysis of variance allows researchers to explore the differences between groups. When only two groups are being compared the F test is sufficient to tell the researcher if significance has been achieved (Fraenkel & Wallen, 2000). For the purposes of this study, one group of students were being tested under two conditions, the students were grouped in accordance to the condition. When answering the survey about themselves they served as one group and when answering the survey about their peers' perspective they served as another group. Gender was also utilized in the second research question to separate groups. A repeated measures ANOVA is appropriate for the current study as it is useful with a between-within group design and differs slightly from a standard multivariate analysis.

The repeated measures ANOVA or two-way ANOVA with between-within factors, allows for all members of a sample to be measured under a number of different conditions (UCLA, 2012). In the current study, the condition is considered to be the subjects answering questions from about their own attitudes and then answering the same questions regarding their peers' perspectives. This is a major difference between simple

multivariate design and repeated measures ANOVA, each trial represents the measurement of the same characteristic under a different condition (UCLA, 2012). For the purposes of this study, the dependent variables, attitudes toward help seeking and peer perspective on help seeking, were treated as a single measure given to one group of persons on two different occasions or under two different conditions making the repeated measures ANOVA the appropriate analysis.

There are a number of assumptions or limitations that are associated with use of ANOVA analysis. In order to improve the reliability of your testing instruments it is necessary for researchers to choose a well-validated survey with internal consistency. In the current study the researcher gave attention to not changing the contents of the items in the adapted version of the Inventory of Attitudes Toward Seeking Mental Health Services. In use of the analysis of variance, researchers should give attention to safeguard against selecting covariate variables that correlate (Coolidge, 2006). In the current study the researcher utilized the body of literature surrounding mental health of college students and social norms theory to guide the selection of the covariate. ANOVA assumes that the relationship between dependent variables and the covariate is linear; violations of this assumption are likely to reduce the power of the test (Coolidge, 2006). The final assumption in use of a two-way ANOVA requires that the relationship between the covariate and dependent variable for both the treatment and control groups is the same.

The repeated measures ANOVA carries the standard set of assumptions associated with a typical analysis of variance, extended to the matrix case: multivariate

normality, homogeneity of covariance matrices, and independence (UCLA, 2012). This type of analysis is resistant to violations of the first two assumptions (Lane, 2012; UCLA, 2012). However, there is a potential for invalid F statistics to be produced due to violations of independence when random selection assignment methods are not employed (Lane, 2012; UCLA, 2012). In addition to these standard assumptions, the assumption of sphericity, a restrictive assumption about the variances and correlations of the dependent variables, is applicable in within-subject ANOVA analysis (Lane, 2012). There is an assumption that all the correlations and variances are equal according to the assumption of sphericity (Lane, 2012). When sphericity is violated an inflated Type I error usually results (Lane, 2102; UCLA, 2012)

## Chapter 4: Results

This chapter will present the analysis of the data collected from this research. Included in this chapter are the results of the statistical analysis for each of the variables examined in the study. The information contained in this chapter will include the data derived from the participant responses on the Inventory of Attitudes Toward Seeking Mental Health Services and their perception of peer responses concerning the items on the inventory as well as information from the demographic survey. The descriptive data for the research participants is provided first. Secondly, the performance reliability and validity of the research instrument used for the research is reported. Finally, the research questions and analysis used for null hypothesis testing are offered.

### Population Characteristics

The unit of analysis for this study will be Ohio University undergraduate students. The population under investigation is undergraduate students in the College of Health Sciences and Professions and the Patton College of Education and who were enrolled in courses in fall semester of the 2012-2013 academic year. The researcher was granted access to classrooms as several professors were willing to make their classes available for survey distribution for the purposes of the current study. The number of students required for this study was approximately 200 subjects, determined by the G\*Power program. The pool of available students was over 200 based on the enrollment in courses that the researcher had access to for the current study. The pool of students was a larger number to allow for invalid questionnaires and other issues involving the collection of data. A total of 206 survey instruments were completed and were used for

demographic information and analysis. Missing values on the survey instrument were entered into SPSS and handled by the statistical package in accordance with appropriate analytical procedure.

The Ohio University college student participants in the current study received a demographic questionnaire that requested information about their age, gender, race, year in college, employment status, and their college major.

### Age

Of the 206 participants, 35 reported that they were 18 years old accounting for 17% of the sample, 27 stated that they were 19 years old accounting for 13.1% of the total participants, 39 participants identified themselves as being 20 years old compiling 18.9% of the sample, 56 participants reported that they were 21 representing 27.2% of the total participants, while 49 people stated that they were 22 and over accounting for 23.8% of the sample.

Table 4.1 Age of Population

Age	Frequency	Percent	Valid Percent	Cumulative Percent
18	35	17.0	17.0	17.0
19	27	13.1	13.1	30.1
20	39	18.9	18.9	49.0
21	56	27.2	27.2	76.2
21	56	27.2	27.2	76.2
22 and over	49	23.8	23.8	100.0
Total	206	100.0	100.0	100.0

### Gender

The population consisted of mostly females with 174 of the sample being women. This indicates that 84.5% of the sample were women while 15.5% of the population were men. There were 32 male participants.

Table 4.2 Gender of Population

Gender	Frequency	Percent	Valid Percent	Cumulative Percent
Male	32	15.5	15.5	15.5
Female	174	84.5	84.5	100.0
Total	206	100.0	100.0	100.0

### Race

There are 184 white people, consisting of 89.3% of the total population. There were 20 non-white people and 2 participants who did not account for their race accounting for 10.7% of the sample. The breakdown by race is as follows: 13 African Americans, consisting of 6.3% of the population, 3 Asians, consisting of 1.5% of the population, 1 non-white Hispanic or Latino, consisting of .5% of the population, and 3 people who listed themselves as other accounting for 1.5% of the population.

Table 4.3 Race of Population

Race	Frequency	Percent	Valid Percent	Cumulative Percent
African American	13	6.3	6.4	6.4
Asian Non-White	3	1.5	1.5	7.8
Hispanic or Latino	1	.5	.5	8.3
White	184	89.3	90.2	98.5
Other	3	1.5	1.5	100.0
Total	204	99.0	100.0	
System	2	1.0		
	206			
		100.0		

### Year in College

Participants were asked to indicate the year in college that they were. The breakdown is as follows: 50 students reported that they were freshman, consisting of 24.3% of the population, 26 stated that they were sophomores, consisting of 12.6% of the sample, 47 reported that they were juniors, accounting for 22.8% of the population, 65 were seniors, consisting of 31.6% of the population, 15 were 5<sup>th</sup> year seniors, accounting for 7.3% of the sample, and 3 were graduate students, making up 1.5% of the sample.



Table 4.4 Year in College in Population

<b>Year in College</b>	<b>Frequency</b>	<b>Percent</b>	<b>Valid Percent</b>	<b>Cumulative Percent</b>
Freshman	50	24.3	24.3	24.3
Sophomore	26	12.6	12.6	36.9
Junior	47	22.8	22.8	59.7
Senior	65	31.6	31.6	91.3
5 <sup>th</sup> Year Senior	15	7.3	7.3	98.5
Grad Student	3	1.5	1.5	100.0
Total	206	100.0	100.0	100.0

### **Employment Status**

Of the 206 participants in the study 109 are employed. This indicates that 52.9% of the population have jobs while 47.1% of the sample are unemployed, consisting of 97 participants.

Table 4.5 Employment Status of Population

<b>Employment Status</b>	<b>Frequency</b>	<b>Percent</b>	<b>Valid Percent</b>	<b>Cumulative Percent</b>
Employed	109	52.9	52.9	52.9
Unemployed	97	47.1	47.1	100.0
Total	206	100.0	100.0	100.0

### College Major

The participants were asked if their college majors are related to counseling or a mental health related field. They were given two options for their answer about their major: counseling or mental health related field or non-counseling or non-mental health related field. 160 participants, 77.7%, in the study responded that their major was not related to counseling or mental health while 44 respondents, 21.4% of the population responded that their majors were related to counseling or mental health. 2 of the respondents had missing information on this question on the demographic survey.

Table 4.6 College Major of Population

College Major	Frequency	Percent	Valid Percent	Cumulative Percent
Counseling or Mental Health Profession	44	21.4	21.6	21.6
Non-Counseling or Non-Mental Health Profession	160	77.7	78.4	100.0
Total	204	99	100.0	
System	2	1.0		
	206	100.0		

### **Assumptions of Analysis of Variance**

Analysis of Variance (ANOVA) has been used to study outcome variables that contributed to group differences. Multivariate analysis investigates underlying assumptions that are a point of contention with this type of analysis as a result of the complex nature of relationships between variables (Hair, Anderson, Tatham, & Black, 1998). In some studies that employ multivariate analysis as a means of methodology the complexity of results may disguise the presence of assumption violations making investigating assumptions a more convoluted issue to manage (Hair, Anderson, Tatham, & Black, 1998). In the current study the complexity of relationships found in many multivariate studies that complicate the examination of assumptions is not problematic. One challenge of multivariate studies is the examination of assumptions due to the complexity of relationships between the dependent and independent variables. In the current study, this issue is minimized since there is only one dependent variable and one independent variable.

There are three assumptions that must be met when using repeated measures ANOVA analysis: independence of the observations, multivariate normality, and sphericity (Hair, Anderson, Tatham, & Black, 1998). In the case of the first assumption, independence of observation was met because each person completed the measures of attitude independently while under a structured administration of the instrument. The conditions, self-attitudes and perception of peers' attitudes, of the repeated measure occurred at the same location and both were based on individual responses to a questionnaire. Groups were determined based on an individual characteristic not

influenced by the environment and no subject was assigned to more than one group. Since participants were given the same questions on both survey administrations, but asked to answer from different perspectives this should maximize the independence of observation.

The multivariate normality of the dependent variable within each group was determined by a visual representation of stem and leaf plot of data for the paired dependent variables. This result showed a normal distribution for females on both dependent measures and a non-normal distribution for males on both dependent measures. The Shapiro-Wilk test of normality was also performed with significance for males for IASMHS condition 1 (.878;  $p=.004$ ) and IASMHS condition 2 (.810;  $p=.000$ ) and not significant for females for IASMHS condition 1 (.992;  $p=.533$ ) and IASMHS condition 2 (.991;  $p=.394$ ). Thus, confirming the visual representation that multivariate normality assumption was not met for males and was met for females. Based on skewness and kurtosis statistic tests, non-normality distribution among the male group appears to be based on both skewness and kurtosis. The ANOVA F statistic is known to be robust against non-normality so the impact of these non-normal distributions on power and significance is small (Hair, Anderson, Tatham, & Black, 1998). The power for all the statistical analyses was not significantly impacted.

The sphericity assumption states that there are equal variances of the differences for all pairs of repeated measures. Since the dependent variable in the current study has two levels the test of sphericity is not applicable to this research design as the sphericity assumption by definition is always met for designs with only two levels of a repeated

measures factor. Therefore, it is not necessary to conduct a Mauchly test on the data in the current study and as this assumption was met.

### **Instrumentation**

All participants were given a three part questionnaire: Inventory of Attitudes Toward Seeking Mental Health Services, an adapted version of Inventory of Attitudes Toward Seeking Mental Health Services that asked participants to answer questions based on their perception of how their peers would answer, and a demographic survey. The demographic part of the questionnaire was a series of questions to gather information about participants such as age, gender, race, degree program, and grade level.

The Inventory of Attitudes Towards Seeking Mental Health Services (IASMS; Mackenzie, C.S., Knox, V.J., Gekoski, W.L., & Macaulay, H.L., 2004, see Appendix B) is a 24-item questionnaire that measures attitudes toward seeking professional psychological help. Items are worded in the form of definitive statements and ask participants to answer based on a five point Likert scale rating 0 (disagree) to 4 (agree). Upon rigorous scrutiny of the item loadings Mackenzie et al. (2006) labeled three factors: “psychological openness, help-seeking propensity, and indifference to stigma” (p.575). “The psychological openness subscale scores seek to measure the extent to which individuals are open to acknowledging that they have a psychological problem and to the possibility of seeking mental health services or psychological help for such issues” (Mackenzie et al., 2004, p. 2415). “The help-seeking propensity subscale scores measure the extent to which individuals believe that they are willing and able to seeking professional psychological help” (Mackenzie et al., 2004, p. 2415). Lastly, “scores on the

indifference to stigma subscale reflect the extent to which individuals are concerned about what others who are of value or importance in their lives may think if they knew that the individual was seeking professional help for psychological problems” (Mackenzie et al., 2004, p. 2415). Subjective norms associated with indifference to stigma are reflected in items including, “I would be embarrassed if my neighbor saw me going into the office of a professional who deals with psychological problems.”

The inspection of item loadings performed by Mackenzie et al. (2004) led to the “factor labels: psychological openness, help-seeking propensity, and indifference to stigma” (p. 2412). Mackenzie et al. (2004) recoded all the negatively worded items so that higher scores represent more positive attitudes. The extent to which items are internally consistent was measured using Cronbach’s alpha with internal consistency for the entire measure, IASMHS, equaling .87 (Mackenzie et al. 2004). Alpha was .82 for the psychological openness scale, .76 for the help-seeking propensity scale, and .79 for the indifference to stigma subscale (Mackenzie et al., 2004). The research completed by Mackenzie et al. (2004) found the three factors to be positively correlated with one another.

Table 4.7 Factor structure for the Inventory of Attitudes Toward Seeking Mental Services (Mackenzie et al., 2004)

<b>Item #</b>	<b>Factor 1: Psychological Openness</b>
12	Psychological problems, like many things, tend to work out by themselves.
1	There are certain problems which should not be discussed outside of one's immediate family.
9	People should work out their own problems; getting professional help should be a last resort
4	Keeping one's mind on a job is a good solution for avoiding personal worries and concerns
18	There is something admirable in the attitudes of people who are willing to cope with their conflicts and fears without resorting to professional help
14	There are experiences in my life I would not discuss with anyone
7	It is probably best not to know everything about oneself.
<b>Item #</b>	<b>Factor 2: Help-Seeking Propensity</b>
19	If I believed I were having a mental breakdown, my first inclination would be to get professional attention
15	I would want to get professional help if I were worried or upset for long period of time
8	If I were experiencing a serious psychological problem at this point in my life, I would be confident that I could find relief in psychotherapy
13	It would be relatively easy for me to find the time to see a professional for psychological problems
2	I would have a very good idea of what to do and who to talk to if I decided to seek professional help for psychological problems
10	If I were to experiencing psychological problems, I could get professional help if I wanted to
5	If good friends asked my advice about a psychological problem, I might recommend that they see a professional
22	I would willingly confide intimate matters to an appropriate person if I thought it might help me or a member of my family.

Table 4.7 Continued

Item #	Factor 3: Indifference to Stigma
6	Having been mentally ill carries with it a burden of shame
24	I would be embarrassed if my neighbor saw me going into the office of a professional who deals with psychological problems
11	Important people in my life would think less of me if they were to find out that I was experiencing psychological problems
17	Having been diagnosed with a mental disorder is blot on a person's life
16	I would be uncomfortable seeking professional help for psychological problems because people in my social or business circles might find out about it
20	I would feel uneasy going to a professional because of what some people would think
3	I would not want my significant other (spouse, partner, etc.) to know if I were suffering from psychological problems.
23	Had I received treatment for psychological problems, I would not feel that it ought be "covered up."

Cronbach's alpha is used to determine internal consistency of the scale. Results from the current study support .8 as the degree of consistency for Chronbach's alpha. In the current study for condition 1 for total scores Cronbach's  $\alpha = .8983$ ,  $n = 195$  indicating the scale to be internally consistent. In the current study for condition 1: factor1 Cronbach's  $\alpha = .7336$ ,  $n = 204$ ; factor 2: Cronbach's  $\alpha = .7336$ ,  $n = 204$ ; and factor 3: Cronbach's  $\alpha = .7197$ ,  $n = 203$ . In the current study for condition 2 In the current study for condition 2 for total scores Cronbach's  $\alpha = .8507$ ,  $n = 202$  indicating the scale to be internally consistent. In the current study for condition 1: factor1 Cronbach's  $\alpha = .8104$ ,  $n = 205$ ; factor 2: Cronbach's  $\alpha = .7550$ ,  $n = 197$ ; and factor 3: Cronbach's  $\alpha = .8063$ ,  $n = 199$ .



Wilks' lambda ( $\Lambda$ ) is the multivariate statistic used in the current study as the means of data analysis for a main or interaction source, ranging from 0 to 1 where 0 indicates no relation between a repeated-measures source and the dependent variable and a 1 indicates the strongest relationship possible (Green & Salkind, 2005). "The effect size is described as Partial Eta squared (partial  $\eta^2$ ), and is interpreted as .01 - .05 = small effect; .06 - .13 = moderate effect; and anything larger than .14 = large effect" (Cohen, 1988, p.473).

The current study utilized one independent variable: gender and one dependent variable: attitudes toward help seeking and peer perspective on attitudes toward help seeking. For the purposes of this study and analysis, the independent variable is considered a between group variable with two levels, male and female. For analytical purposes, the dependent variables are within factors and are treated as a single measure of attitude taken on one group of persons under two conditions at one administration. The dependent variables are operationalized through use of the Inventory of Attitudes Toward Seeking Mental Health Services. As the two variables are measured with the same items, they are commensurate or directly comparable. The repeated measures were the college students being asked about their own attitudes toward help seeking and their perception of peers' attitudes toward help seeking. The quantitative analysis in this study was conducted using a repeated measure ANOVA to analyze data for question 1 and a two-way repeated measures ANOVA to analyze the data for question 2. The results for each of the questions are presented in this chapter.

## Presentation of Results

The purpose of this study was to examine whether or not statistically significant mean differences existed among college students attitudes and their perception of their peers' attitudes toward help seeking behavior and whether or not statistically significant mean differences existed between male and female college students' attitudes and perception of their peers' attitudes toward help seeking behavior. The following research questions were examined in the study:

*Research Question 1.* Are there statistically significant mean differences among college students' attitudes and perceptions of their peers' attitudes toward help seeking behavior (as measured by total scores on the Inventory of Attitudes Toward Seeking Mental Health Services)?

Table 4.8 One-Way Repeated Measure ANOVA statistics for Research Question 1

Effect	Value	F	Hypothesis df	Error df	Sig	Observed Power
Wilks' Lambda	.452	230.482	1.000	190.000	.000	1.00

The mean total scores for the Inventory of Attitudes Toward Seeking Mental Health Services (IATSMHS), results for the one-way repeated measure ANOVA revealed that there are statistically significant mean differences on the two conditions of help seeking behaviors. Wilks' Lambda statistical test was used to identify mean differences among condition 1 and condition 2 with a value of 1.213. The multivariate

test statistic, F value, is  $F_{(1,190)} = 230.482$ ,  $p = .000$  measured at  $p < .05$  level of significance.

Table 4.9 Descriptive Statistics for Research Question 1

Condition	Mean	Standard Deviation	N
1: IASMHS	60.60	13.481	191
2: PP_IASMHS	39.04	15.347	191

Descriptive statistics were obtained for the mean total scores on conditions 1 and 2 on the Inventory of Attitudes Toward Seeking Mental Health Services (IASMHS) where condition 1 indicates the college students' responses to the survey questions regarding their own attitudes toward help seeking behavior while condition 2 refers college students' perception of their peers' attitudes toward help seeking behavior. Based on the results of the statistical analysis the mean for condition 1 is 60.60 and the mean for condition 2 is 39.04. The differences are seen within the repeated measure of condition 1 and 2 with the mean for condition 1 being higher.

*Research Question 1.a.* Are there statistically significant mean differences among college students' attitudes and perceptions of their peers' attitudes toward help seeking behavior (as measured by Psychological Openness on the Inventory of Attitudes Toward Seeking Mental Health Services)?

Table 4.10 One-Way Repeated Measure ANOVA statistics for Research Question 1a

Effect		Value	F	Hypothesis df	Error df	Sig	Observed Power
COND	Wilks' Lambda	.482	208.816	1.000	194.000	.000	1.00

Mean scores for the factor psychological openness on the Inventory of Attitudes Toward Seeking Mental Health Services (IATSMHS), results for the one-way repeated measure ANOVA revealed that there are statistically significant mean differences on the two conditions of help seeking behaviors regarding the psychological openness factor. Wilks' Lambda statistical test was used to identify mean differences among condition 1 and condition 2 with a value of .482. The multivariate test statistic, F value, is  $F(1,194) = 208.816$ ,  $p = .000$  measured at  $p < .05$  level of significance.

Table 4.11 Descriptive Statistics for Research Question 1a

Condition	Mean	Standard Deviation	N
F1: Psychological Openness	18.79	5.842	195
PP_F1 Psychological Openness	11.15	5.537	195

Descriptive statistics were found for the mean scores regarding the psychological openness subscale on conditions 1 and 2 on the Inventory of Attitudes Toward Seeking Mental Health Services (IASMHS) where condition 1 indicates the college students'

responses to the survey questions regarding their own attitudes toward help seeking behavior while condition 2 refers college students' perception of their peers' attitudes toward help seeking behavior. Based on the results of the statistical analysis the mean for condition 1 is 18.79 and the mean for condition 2 is 11.15. The differences are seen within the repeated measure of condition 1 and 2 with the mean for condition 1 being higher.

*Research Question 1.b.* Are there statistically significant mean differences among college students' attitudes and perceptions of their peers' attitudes toward help seeking behavior (as measured by Help-Seeking Propensity on the Inventory of Attitudes Toward Seeking Mental Health Services)?

Table 4.12 One-Way Repeated Measure ANOVA statistics for Research Question 1b

Effect		Value	F	Hypothesis is df	Error df	Sig	Observed Power
<b>COND</b>	Wilks' Lambda	.643	108.293	1.000	195.000	.000	1.00

Mean scores for the factor help-seeking propensity on the Inventory of Attitudes Toward Seeking Mental Health Services (IATSMHS), results for the one-way repeated measure ANOVA revealed that there are statistically significant mean differences on the two conditions of help seeking behaviors regarding the help-seeking propensity factor. Wilks' Lambda statistical test was used to identify mean differences among condition 1 and condition 2 with a value of .643. The multivariate test statistic, F value, is  $F(1,195) = 108.293$ ,  $p = .000$  measured at  $p < .05$  level of significance.

Table 4.13 Descriptive Statistics for Research Question 1b

Condition	Mean	Standard Deviation	N
F2: Help-Seeking Propensity	21.85	4.860	196
PP_F1 Psychological Openness	16.67	5.896	196

Descriptive statistics were found for the mean scores regarding the help-seeking propensity subscale on conditions 1 and 2 on the Inventory of Attitudes Toward Seeking Mental Health Services (IASMHS) where condition 1 indicates the college students' responses to the survey questions regarding their own attitudes toward help seeking behavior while condition 2 refers college students' perception of their peers' attitudes toward help seeking behavior. Based on the results of the statistical analysis the mean for condition 1 is 21.85 and the mean for condition 2 is 16.67. The differences are seen within the repeated measure of condition 1 and 2 with the mean for condition 1 being higher.

*Research Question 1.c.* Are there statistically significant mean differences among college students' attitudes and perceptions of their peers' attitudes toward help seeking behavior (as measured by Indifference to Stigma on the Inventory of Attitudes Toward Seeking Mental Health Services)?

Table 4.14 One-Way Repeated Measure ANOVA statistics for Research Question 1c

Effect	Value	F	Hypothesis df	Error df	Sig	Observed Power
COND Wilks' Lambda	.461	230.140	1.000	197.000	.000	1.00

Mean scores for the factor indifference to stigma on the Inventory of Attitudes Toward Seeking Mental Health Services (IATSMHS), results for the one-way repeated measure ANOVA revealed that there are statistically significant mean differences on the two conditions of help seeking behaviors regarding the indifference to stigma. Wilks' Lambda statistical test was used to identify mean differences among condition 1 and condition 2 with a value of .461. The multivariate test statistic, F value, is  $F(1,197) = 230.140$ ,  $p = .000$  measured at  $p < .05$  level of significance.

Table 4.15 Descriptive Statistics for Research Question 1c

Condition	Mean	Standard Deviation	N
F2: Indifference to Stigma	19.85	6.473	198
PP_F1 Indifference to Stigma	11.29	6.952	198

Descriptive statistics were found for the mean scores regarding the help-seeking propensity subscale on conditions 1 and 2 on the Inventory of Attitudes Toward Seeking Mental Health Services (IASMHS) where condition 1 indicates the college students' responses to the survey questions regarding their own attitudes toward help seeking behavior while condition 2 refers college students' perception of their peers' attitudes toward help seeking behavior. Based on the results of the statistical analysis the mean for condition 1 is 19.85 and the mean for condition 2 is 11.29. The differences are seen within the repeated measure of condition 1 and 2 with the mean for condition 1 being higher.

*Research Question 2.* Are there statistically significant mean differences among male and female college students' attitudes and perceptions of their peers attitudes toward help seeking behavior (as measured by total scores on the Inventory of Attitudes Toward Seeking Mental Health Services)?

Table 4.16 Two-Way Repeated Measures ANOVA statistics for Research Question 2

Effect		Value	F	Hypothesis df	Error df	Sig.	Observed Power
<b>COND</b>	Wilks'	.718	74.174	1.000	189.000	.000	1.000
	Lambda						
<b>COND</b>	Wilks'	.941	11.803	1.000	189.000	.001	.928
<b>*</b>	Lambda						
<b>Gender</b>							

Mean total scores for the Inventory of Attitudes Toward Seeking Mental Health Services (IATSMHS) results for the two-way repeated measures ANOVA revealed that there are statistically significant mean differences in attitudes toward help seeking behavior within and between conditions 1 and 2 suggesting a main effect. Where condition represents within group factor and condition \* gender represents between group factor, Wilks' Lambda has a value of .718 for within group factors and .941 for between group factors suggesting that the null hypothesis be rejected for research question 2. The multivariate test statistic, F value, is  $F, (1,189) = 74.174, p = .000$  measured at  $p < .05$  for within group factor is  $F, (1,189) = 11.803, p = .001$  measured at  $p < .05$  level of significance for between. The results indicate the presence of an interaction.



Table 4.17 Descriptive Statistics for Research Question 2

<b>Descriptive Statistics</b>	<b>Gender</b>	<b>Mean</b>	<b>Standard Deviation</b>	<b>N</b>
IASMHS: Total Score Condition 1	<b>Male</b>	56.29	13.722	28
	<b>Female</b>	61.34	13.341	163
	<b>Total</b>	60.60	13.481	191
PP_IASMHS: Perception of Peers: Total Score Condition 2	<b>Male</b>	46.18	12.455	28
	<b>Female</b>	37.82	15.494	163
	<b>Total</b>	39.04	15.347	191

Descriptive statistics were found for the mean scores regarding the total score among male and female college students on conditions 1 and 2 on the Inventory of Attitudes Toward Seeking Mental Health Services (IASMHS) where condition 1 indicates the college students' responses to the survey questions regarding their own attitudes toward help seeking behavior while condition 2 refers college students' perception of their peers' attitudes toward help seeking behavior. Based on the results of the statistical analysis the mean for condition 1 in regard to females is 61.34 and the mean for condition 2 is 37.82. The results of the statistical analysis show that in regards to male college students the mean for condition 1 is 56.29 and the mean for condition 2 is 46.18. The differences are seen within the repeated measure of condition 1 and 2 with the mean for condition 1 being higher for both males and females. Results reveal that

females had a higher mean score on condition 1 while males had a higher mean score on condition 2.

*Research Question 2a.* Are there statistically significant mean differences among male and female college students' attitudes and perceptions of their peers' attitudes toward help seeking behavior (as measured by scores on psychological openness subscale on the Inventory of Attitudes Toward Seeking Mental Health Services)?

Table 4.18 Two-Way Repeated Measures ANOVA statistics for Research Question 2a

Effect		Value	F	Hypothesis df	Error df	Sig.	Observed Power
<b>FACTOR 1</b>	Wilks' Lambda	.756	62.275	1.000	193.000	.000	1.000
<b>FACTOR 1 * Gender</b>	Wilks' Lambda	.925	15.550	1.000	193.000	.000	.975

The psychological openness subscale score for the Inventory of Attitudes Toward Seeking Mental Health Services (IATSMHS) results for the two-way repeated measures ANOVA revealed that there are statistically significant mean differences in attitudes toward help seeking behavior within and between conditions 1 and 2 suggesting a main effect. Where factor 1 represents within group factor and factor 1\* gender represents between group factor, Wilks' Lambda has a value of .756 for within group factors and .925 for between group factors suggesting that the null hypothesis be rejected for research question 2a. The multivariate test statistic, F value, is  $F(1,193) = 62.275, p = .000$  measured at  $p < .05$  for within group factor is  $F(1,193) = 15.550, p = .000$  measured at  $p$

< .05 level of significance for between. The results indicate the presence of an interaction.

Table 4.19 Descriptive Statistics for Research Question 2a

<b>Descriptive Statistics</b>	<b>Gender</b>	<b>Mean</b>	<b>Standard Deviation</b>	<b>N</b>
F1: Psychological Openness Condition 1	<b>Male</b>	15.66	6.694	29
	<b>Female</b>	19.34	5.522	166
	<b>Total</b>	18.79	5.842	195
PP_F1: Perception of Peers: Psychological Openness Condition 2	<b>Male</b>	12.83	4.751	29
	<b>Female</b>	10.86	5.625	166
	<b>Total</b>	11.15	5.537	195

Descriptive statistics were found for the mean scores regarding psychological openness among male and female college students on conditions 1 and 2 on the Inventory of Attitudes Toward Seeking Mental Health Services (IASMHS) where condition 1 indicates the college students' responses to the survey questions regarding their own attitudes toward help seeking behavior while condition 2 refers college students' perception of their peers' attitudes toward help seeking behavior. Based on the results of the statistical analysis the mean for condition 1 in regard to females is 19.34 and the mean for condition 2 is 10.86. The results of the statistical analysis show that in regards to male college students the mean for condition 1 is 15.66 and the mean for condition 2 is

12.83. The differences are seen within the repeated measure of condition 1 and 2 with the mean for condition 1 being higher for both males and females. Results reveal that females had a higher mean on condition 1 while males had a higher mean on condition 2.

*Research Question 2b.* Are there statistically significant mean differences among male and female college students' attitudes and perceptions of their peers' attitudes toward help seeking behavior (as measured by scores on help-seeking propensity subscale on the Inventory of Attitudes Toward Seeking Mental Health Services)?

Table 4.20 Two-Way Repeated Measures ANOVA statistics for Research Question 2b

Effect		Value	F	Hypothesis df	Error df	Sig.	Observed Power
<b>FACTOR</b>	Wilks'	.857	32.333	1.000	194.000	.000	1.000
<b>2</b>	Lambda						
<b>FACTOR</b>	Wilks'	.961	7.791	1.000	194.000	.006	.793
<b>2 *</b>	Lambda						
<b>Gender</b>							

Help-seeking propensity subscale for the Inventory of Attitudes Toward Seeking Mental Health Services (IATSMHS) results for the two-way repeated measures ANOVA revealed that there are statistically significant mean differences in attitudes toward help seeking behavior within and between conditions 1 and 2 suggesting a main effect. Where factor 2 represents within group factor and factor 2\* gender represents between group factor, Wilks' Lambda has a value of .857 for within group factors and .961 for between group factors suggesting that the null hypothesis be rejected for research question 2b.

The multivariate test statistic, F value, is  $F(1,194) = 32.333, p = .000$  measured at  $p < .05$

for within group factor is  $F_{(1,194)} = 7.791$ ,  $p = .006$  measured at  $p < .05$  level of significance for between. The results indicate the presence of an interaction.

Table 4.21 Descriptive Statistics for Research Question 2b

<b>Descriptive Statistics</b>	<b>Gender</b>	<b>Mean</b>	<b>Standard Deviation</b>	<b>N</b>
F2: Help-Seeking Propensity Condition 1	<b>Male</b>	21.83	3.806	30
	<b>Female</b>	21.85	5.036	166
	<b>Total</b>	21.85	4.860	196
PP_F2: Perception of Peers: Help-Seeking Propensity Condition 2	<b>Male</b>	19.87	4.732	30
	<b>Female</b>	16.09	5.912	166
	<b>Total</b>	16.67	5.896	196

Descriptive statistics were found for the mean scores regarding help-seeking propensity among male and female college students on conditions 1 and 2 on the Inventory of Attitudes Toward Seeking Mental Health Services (IASMHS) where condition 1 indicates the college students' responses to the survey questions regarding their own attitudes toward help seeking behavior while condition 2 refers college students' perception of their peers' attitudes toward help seeking behavior. Based on the results of the statistical analysis the mean for condition 1 in regard to females is 21.83 and the mean for condition 2 is 16.09. The results of the statistical analysis show that in regards to male college students the mean for condition 1 is 21.85 and the mean for

condition 2 is 19.87. The differences are seen within the repeated measure of condition 1 and 2 with the mean for condition 1 being higher for both males and females. Results reveal that males and females had almost equal means on condition 1 while males had a higher mean on condition 2.

*Research Question 2c.* Are there statistically significant mean differences among male and female college students' attitudes and perceptions of their peers' attitudes toward help seeking behavior (as measured by scores on indifference to stigma subscale on the Inventory of Attitudes Toward Seeking Mental Health Services)?

Table 4.22 Two-Way Repeated Measures ANOVA statistics for Research Question 2c

Effect		Value	F	Hypothesis df	Error df	Sig.	Observed Power
<b>FACTOR</b>	Wilks'	.712	79.121	1.000	196.000	.000	1.000
<b>3</b>	Lambda						
<b>FACTOR</b>	Wilks'	.960	8.222	1.000	196.000	.005	.814
<b>3 *</b>	Lambda						
<b>Gender</b>							

The indifference to stigma subscale for the Inventory of Attitudes Toward Seeking Mental Health Services (IATSMHS) results for the two-way repeated measures ANOVA revealed that there are statistically significant mean differences in attitudes toward help seeking behavior within and between conditions 1 and 2 suggesting a main effect. Where factor 3 represents within group factor and factor 3\* gender represents between group factor, Wilks' Lambda has a value of .712 for within group factors and .960 for between group factors suggesting that the null hypothesis be rejected for research

question 2c. The multivariate test statistic, F value, is  $F, (1,196) = 79.121, p = .000$  measured at  $p < .05$  for within group factor is  $F,(1,196) = 8.222, p = .005$  measured at  $p < .05$  level of significance for between. The results indicate the presence of an interaction.

Table 4.23 Descriptive Statistics for Research Question 2c

<b>Descriptive Statistics</b>	<b>Gender</b>	<b>Mean</b>	<b>Standard Deviation</b>	<b>N</b>
F3: Indifference to Stigma Condition 1	<b>Male</b>	18.31	6.783	29
	<b>Female</b>	20.12	6.402	169
	<b>Total</b>	19.85	6.473	198
PP_F2: Perception of Peers: Indifference to Stigma Condition 2	<b>Male</b>	13.59	6.202	29
	<b>Female</b>	10.90	7.014	169
	<b>Total</b>	11.29	6.952	198

Descriptive statistics were found for the mean scores regarding indifference toward stigma among male and female college students on conditions 1 and 2 on the Inventory of Attitudes Toward Seeking Mental Health Services (IASMHS) where condition 1 indicates the college students' responses to the survey questions regarding their own attitudes toward help seeking behavior while condition 2 refers college students' perception of their peers' attitudes toward help seeking behavior. Based on the results of the statistical analysis the mean for condition 1 in regard to females is 20.12 and the mean for condition 2 is 10.90. The results of the statistical analysis show that in

regards to male college students the mean for condition 1 is 18.31 and the mean for condition 2 is 13.59. The differences are seen within the repeated measure of condition 1 and 2 with the mean for condition 1 being higher for both males and females. Results reveal that females had higher means on condition 1 while males had a higher mean on condition 2.



## Chapter 5: Discussion

This chapter will discuss the results of the research that will include a review of the significant findings. Limitations of the study will be discussed as well as implications for future research.

The study examined the differences in means among college students' attitudes and perceptions of their peers' attitudes toward help seeking behavior and differences in mean among male and female college students' attitudes and perception of their peers' attitudes toward help seeking behavior. The research questions in this study were explored using a psychometrically sound instrument: The Inventory of Attitudes Toward Seeking Mental Health Services. The current study utilized one independent variable: gender and one dependent variable: attitudes toward help seeking and peer perspective on attitudes toward help seeking. For the purposes of this study and analysis, the independent variable is considered a between group variable with two levels, male and female. For analytical purposes, the dependent variables are within factors and are treated as a single measure of attitude taken on one group of persons under two conditions at one administration. The dependent variables are operationalized through use of the Inventory of Attitudes Toward Seeking Mental Health Services. As the two variables are measured with the same items, they are commensurate or directly comparable. The repeated measures were the college students being asked about their own attitudes toward help seeking and their perception of peers' attitudes toward help seeking. The quantitative analysis in this study was conducted using a repeated measure ANOVA to analyze data for question 1 and a two-

way repeated measures ANOVA to analyze the data for question 2. In order to complete the study the following research questions were considered in the study:

1. Are there statistically significant mean differences among college students' attitudes and perceptions of their peers' toward mental health help seeking behavior (as measured by total scores on the Inventory of Attitudes Toward Seeking Mental Health Services)
  - a. Are there statistically significant mean differences among college students' attitudes and perceptions of their peers' toward mental health help seeking behavior (as measured by subscale Psychological openness on the Inventory of Attitudes Toward Seeking Mental Health Services)?
  - b. Are there statistically significant mean differences among college students' attitudes and perceptions of their peers' toward mental health help seeking behavior (as measured by subscale help-seeking propensity on the Inventory of Attitudes Toward Seeking Mental Health Services)?
  - c. Are there statistically significant mean differences among college students' attitudes and perception of their peers' toward mental health help seeking behavior (as measured by subscale indifference to stigma on the Inventory of Attitudes Toward Seeking Mental Health Services)?
2. Are there statistically significant mean differences among male and female college students' attitudes and perception of their peers' attitudes toward mental health help seeking behavior (as measured by total scores on the Inventory of Attitudes Toward Seeking Mental Health Services)?

- a. Are there statistically significant mean differences among male and female college students' attitudes and perception of peers' attitudes toward mental health help seeking behavior (as measured by subscale psychological openness on the Inventory of Attitudes Toward Seeking Mental Health Services)?
- b. Are there statistically significant mean differences among male and female college students' attitudes and perception of peers' attitudes toward mental health help seeking behavior (as measured by subscale help-seeking propensity on the Inventory of Attitudes Toward Seeking Mental Health Services)?
- c. Are there statistically significant mean differences among male and female college students' attitudes and perception of peers' attitudes toward mental health help seeking behavior (as measured by subscale indifference to stigma on the Inventory of Attitudes Toward Seeking Mental Health Services)?

### **Purpose of the Study**

The purpose of this study was to examine whether or not statistically significant mean differences existed among college students attitudes and their perception of their peers' attitudes toward help seeking behavior and whether or not statistically significant mean differences existed between male and female college students' attitudes and perception of their peers' attitudes toward help seeking behavior. This study serves to advance the body of literature on social norms theory by providing descriptive research

about college students' attitudes toward seeking professional mental health services and their perception of the extent to which these behaviors occur. This information will provide normative feedback to serve as a foundation for future social norms strategies to positively impact campus mental health.

## **Discussion of Results**

### **Discussion of College Students' Mental Health, Social Norms, and Results**

Since the 1970's research has acknowledged the important role that attitudes play in the decision to seek professional help for psychological problems (Turner, 2012) and are seen as the most consistent and strongest predictor of intentions to seek psychological help (Vogel & Wester, 2003; Mackenzie, Gekoski, & Knox, 2006). Attitudes and opinions of peers are seen as an important predictor of behavior in college age individuals as their peers are seen as an important reference group (Turrisi et al., 2009). LaBrie, Hummer, Hutching, and Neighbors (2009) asserted that college students will often base their attitudes and behaviors on their perception of their social groups' attitudes and behaviors. Social norms theory proposes that individuals misperceive the attitudes and behaviors of their peers to be different than their own when they are not (Berkowitz, 2004; Perkins, 2003). "These inaccurate perceptions of peer attitudes and behaviors cause changes in attitudes and behaviors of individuals based on misperceived norms" (Berkowitz, 2004, p.7) "This in turn can cause the expression or rationalization of problem behavior and the inhibition or suppression of healthy behavior" (Berkowitz, 2004, p.7). Based on the aforementioned information, the current study investigated the difference between college students' attitudes and perception of peer attitudes and the

difference between male and female college students and their perception of peer attitudes in attempt to gain insight into college students' approach to seeking mental health services.

“Social norms theory is a theory of human behavior that operates on the premise of peer influence on behavior” (Berkowitz, 2010, p.3). The navigating principal of social norms theory is that individual behavior is heavily swayed by the perception of attitudes and behaviors of those serving as a peer group for individuals (Berkowitz, 2002). Some other theories of human functioning that fail to differentiate between peer influence on behavior being determined by what peers actually think and do or what individuals believe peers think and do (Perkins, 2003). Social norms theory proposes that behavior is motivated by incorrect perceptions of how other members of our social groups think and act. “The theory predicts that overestimations of problematic behavior will increase problematic behaviors while underestimations of non-risky behaviors will discourage individuals from engaging in them” (Berkowitz, 2004, p.2). Correcting the misperceptions of group norms is likely to result in the decreased problem behavior or increased prevalence of healthy behaviors (Perkins, 2003; Berkowitz, 2004). This rational approach to altering perception, changing attitude toward the acceptability of problem behaviors, and decreasing risk-taking behaviors in adolescents through understanding of how peers influence behaviors and perceptions has a positive impact on future approaches toward intervening in problematic behavior patterns.

The mental health of college students represents a growing concern (Hunt & Eisenberg, 2010) as 91% counseling center directors report a recent trend toward greater

numbers of students with mental health issues and severe psychiatric problems (Gallagher, 2011). While levels of psychiatric disorders and emotional issues continue to plague college students, little research has focused on the impact of collegiate mental health services and resources on the mental health of students (Hunt & Eisenberg, 2011). Blanco et al. (2008) found that psychiatric disorders, particularly disorders related to alcohol use are common in the college-aged population with less than 25% of those surveyed seeking treatment, representing significant concern. The findings of Blanco et al. and other researchers in the field of prevention underscore the importance of treatment and prevention of mental health related issues among college-aged individuals.

### **Research Sample Characteristics Discussion**

The results of the demographics section of the research showed that the majority of the sample was comprised of white females. As discussed in the literature review, previous research has extensive discussion of gender and race in respect to help seeking. The researcher in the current study utilized a convenience sample as access to Ohio University classrooms were used based on professor permission. The classes utilized were in the College of Health Sciences and the College of Education. A sample of 217 students was utilized based on enrollment from the courses that were made available to the researcher. According to demographic data communicated through the Ohio University Institutional Review Board, the student population is comprised of approximately 58% female students and 84% Caucasian students so while the sample may not be representative of the larger population, the sample is representative of the

population of students at Ohio University and explains the gender and racial imbalance that exists in the current study.

The subjects in this study were Ohio University students enrolled in classes in the College of Health Sciences and Professions and the College of Education in fall semester 2012-2013. The researcher was granted access to classrooms of professors who were willing to make their classes available for survey distribution for the purposes of the current study. The convenience sampling strategy utilized in the study enabled the researcher to obtain 206 participants; 32 males and 174 females.

Analysis of variance (ANOVA) was used to reveal the presence of statistically significant mean differences in college students' attitudes toward help seeking and their perception of peers' attitudes toward help seeking and the presence of statistically significant mean differences in male and female college students' attitudes toward help seeking and the perception of peers' attitudes toward help seeking. A one-way repeated measures ANOVA was used to analyze the data regarding college students' attitudes toward help seeking and their perception of peers' attitudes toward help seeking to determine if statistically significant mean differences existed. The one-way repeated measures ANOVA was selected as there was only data for a within group variable to analyze. The analysis was conducted on total scores for the Inventory of Attitudes Toward Mental Health Services, psychological openness, help-seeking propensity, and indifference to stigma. In all cases a statistical significance was found as statistically significant mean differences existed. A two-way repeated measures ANOVA was used to analyze the data regarding male and female college students' attitudes toward help

seeking and their perception of peer attitudes toward help seeking. The two-way repeated measures ANOVA was selected as there was data for a within group variable and between group variable to analyze. The analysis was conducted on total scores for the Inventory of Attitudes Toward Mental Health Services, psychological openness, help-seeking propensity, and indifference to stigma. In all cases a statistical significance was found as statistically significant mean differences existed.

### **Significant Findings**

The data from this study indicated that there were statistically significant mean differences found in college students' attitudes toward help seeking and perception of peers' attitudes toward help seeking as measured by the total score, psychological openness factor, help-seeking propensity factor, and indifference to stigma factor on the the Inventory of Attitudes Toward Seeking Mental Health Services. The data also revealed that there were statistically significant mean differences found in male and female college students' attitudes toward help seeking and their perception of peers' attitudes toward helps seeking as measured by the total score, psychological openness factor, help-seeking propensity factor, and indifference to stigma on the of Attitudes Toward Seeking Mental Health Services. College students perceived their own attitudes to be more favorable than their peers' attitudes toward mental health help seeking in all cases. In dealing with the between group factor, men and women consistently rated themselves as having a more favorable attitude toward mental health help seeking than their peers, however men perceived their peers to have a more favorable attitude toward



total score on the IASMH, psychological openness, help-seeking propensity, and indifference to stigma than women did.

It is interesting to note the findings concerning male perception of their peers attitudes toward help seeking being more favorable than that of the female respondents in the current study. According to the literature, gender is specifically impacted by the disparities in mental health problems and mental health behaviors. While the literature reflects the differences that exist between men and women in their issues with mental health and their approach toward mental health, males are seen as having less favorable attitudes toward mental health help seeking (Moller-Leimkuhler, 2002; Vogel et al., 2007). Gender has been found to play a role in attitudes toward help seeking and has been seen as a predictor of seeking mental health services (Vogel et al., 2007c) with research showing that women have more positive attitudes than men regarding mental health services (Fischer & Farina, 1995) as women seek the help of mental health professionals twice as frequently as their male counterparts (Moller-Leimkuhler, 2002) however according to the findings in the current study, males perceive their peers attitudes to be more favorable about mental health help seeking than female participants did.

### **Summary of Research Questions**

#### **Research Question 1**

*Research Question 1:* Are there statistically significant mean differences among college students' attitudes and perceptions of their peers' attitudes toward help seeking behavior

(as measured by total scores on the Inventory of Attitudes Toward Seeking Mental Health Services)?

A one-way repeated measures ANOVA was utilized for data analysis. The sphericity assumption states that there are equal variances of the differences for all pairs of repeated measures. Since the dependent variable in the current study has two levels the test of sphericity is not applicable to this research design as the sphericity assumption by definition is always met for designs with only two levels of a repeated measures factor. Therefore, it is not necessary to conduct a Mauchly test on the data in the current study and as this assumption was met. Wilks' Lambda test statistic compares differences in attitudes toward help seeking and perception of peers' attitudes toward help seeking. There was a statistically significant difference in reporting among college students' regarding attitudes toward help seeking of self and their perception of their peers' attitudes toward help seeking  $F, (1,190) = 230.482, p = .000$  measured at  $p < .05$ ; Wilks' Lambda = 0.452. This indicates that mean differences between attitudes toward help seeking of self and perception of peer attitudes toward help seeking was statistically significant. The data revealed about college students' attitudes toward help seeking serves as a social norm or group norm for the sample in this study. However, with their perception of their peers' view being different from their own the respondents in the current study reported had an inaccurate perception of the attitudes of their social group toward seeking mental health services. Social norms theory refers to this misperception of social norms and majority belief as pluralistic ignorance. Berkowitz (2004) asserts that these inaccurate perceptions impact attitudes and behavior. Data from the current

study indicated a difference between actual norms that college students' reported as their attitudes toward mental health help seeking and college student perception of attitudes toward help seeking, the current study provides support for the presence of misperceptions among college students about social norms concerning mental health.

The descriptive means of attitudes toward help seeking (60.60) was significantly higher than perception of peers' attitudes toward help seeking (39.04) indicating that respondents perceived their peers to have a less favorable attitude toward help seeking than they had. Respondents in the study considered their peers to have a less favorable attitude about mental health services and help seeking based on an inaccurate perception as revealed in the data. As each participant responded to the Inventory of Attitudes Toward Mental Health Services based on their own attitudes regarding help seeking, they also serve as the peer group for other respondents.

Social norms theory describes the impact of misperception on social norms and attitudes (Berkowitz, 1997; 2001; 2005). The misperception of pluralistic ignorance is the majority belief that their behavior is much more different from their peers when in fact it is not (Berkowitz, 1997; 2001; 2004; 2005). The results of the data provide a meaningful evidence of pluralistic ignorance, as the data revealed that respondents perceived their peers to have a less favorable attitude about mental health help seeking than they did incorrectly perceiving the attitudes of peers to be different from their own when in fact they are not. The results reveal social norms theory at work.

Participants in this study were members of a common peer group. Data in the current study revealed differences in college students' attitudes toward mental health help

seeking and their perception of peers' attitudes toward help seeking. It is important to note that respondents in this sample inaccurately perceived the attitudes of other respondents about mental health services. The presence of misperceptions and overestimation of non-healthy behavior patterns are closely associated with attitudes and beliefs of social groups (Berkowitz, 2002; Perkins, 2003). Many studies in the literature document the predictive nature of misperceptions in the attitudes of young people (Berkowitz, 2002; 2004; Perkins, 2003) and the role that peer groups and perception of peers' attitudes play in decision-making (Turrisi et al., 2009). The participants in this study perceived their peers to feel less favorable about seeking mental health services based on a misperception.

College student mental health presents a significant health concern (Hunt & Eisenberg, 2010) with nearly one half of college students meeting the criteria for at least DSM-IV diagnosis (Blanco et al., 2008). However, the majority of undergraduate students do not seek mental health services as survey statistics indicate that while 2.75 million students were eligible for counseling services in 2011, only 317,000 participated in mental health help seeking (Gallagher, 2010). Literature supports the impact that misperception of social norms has on college student behavior (Hunt & Eisenberg, 2010; Perkins, 2003; Turrisi et al., 2009) and results from the present study also indicate misperceptions exist in college students perception of social norms concerning help seeking behavior. Additionally, the present research supports the appropriateness of using social norms theory to gain understanding of student how students form perspectives

toward mental health help seeking and the subsequent impact that these perspectives have on college student mental health and wellness.

### **Research Question 1a**

*Research Question 1a:* Are there statistically significant mean differences among college students' attitudes and perceptions of their peers' toward help seeking behavior (as measured by subscale Psychological openness on the Inventory of Attitudes Toward Seeking Mental Health Services)?

A one-way repeated measures ANOVA was utilized for data analysis. The sphericity assumption states that there are equal variances of the differences for all pairs of repeated measures. Since the dependent variable in the current study has two levels the test of sphericity is not applicable to this research design as the sphericity assumption by definition is always met for designs with only two levels of a repeated measures factor. Therefore, it is not necessary to conduct a Mauchly test on the data in the current study and as this assumption was met. Wilks' Lambda test statistic compares differences in attitudes toward help seeking and perception of peers' attitudes toward help seeking in regards to psychological openness. Mean scores for the factor psychological openness on the Inventory of Attitudes Toward Seeking Mental Health Services (IATSMHS), revealed that there are statistically significant mean differences on the two conditions of help seeking behaviors regarding the psychological openness factor. Wilks' Lambda statistical test was used to identify mean differences among condition 1 and condition 2; Wilks' Lambda = 0.482. The multivariate test statistic, F value, is  $F(1,194) = 208.816$ ,  $p = .000$  measured at  $p < .05$  level of significance. There was a statistically significant

difference in reporting college students' attitudes toward help seeking of self and their perception of their peers' attitudes toward help seeking in regards to psychological openness. The descriptive means of attitudes toward help seeking (18.79) was significantly higher than perception of peers' attitudes toward help seeking (11.15) in regards to psychological openness indicating that respondents perceived themselves to be more open to acknowledging psychological problems and more open to the possibility of seeking help for psychological issues than their peers.

Through responses to statements on the Inventory of Attitudes Toward Seeking Mental Health Services that included: 'Psychological problems, like many things, tend to work out by themselves,' 'There are certain problems which should not be discussed outside of one's immediate family,' and 'There are experiences in my life I would not discuss with anyone;' psychological openness of participants and their perception of their peers' psychological openness was assessed. An individual's attitudes towards psychological openness have a role in contributing to individual's overall attitude toward mental health services (Mackenzie, 2004). The data in the current study shows that there are differences in the self-attitudes and perception of peer attitudes for psychological openness indicating that college students have misperceptions regarding their peers' attitudes toward this factor. This provides good insight regarding college student perceptions regarding factors that contribute to overall attitudes toward mental health services.

Responses to statements on the Inventory of Attitudes Toward Seeking Mental Health Services included: 'Psychological problems, like many things, tend to work out

by themselves,' 'There are certain problems which should not be discussed outside of one's immediate family,' and 'There are experiences in my life I would not discuss with anyone;' psychological openness of participants and their perception of their peers' help-seeking propensity was assessed. An individual's attitudes towards psychological openness have a role in contributing to individual's overall attitude toward mental health services (Mackenzie, 2004). The data in the current study shows that there are differences in the self-attitudes and perception of peer attitudes for psychological openness indicating that college students have misperceptions regarding their peers' attitudes toward this factor. This provides good insight regarding college student perceptions regarding factors that contribute to overall attitudes toward mental health services.

Results of the current study revealed the presence of pluralistic ignorance, a misperception of majority attitudes, as indicated in the literature surrounding social norms theory (Berkowitz, 2004). The relevance of social norms theory and the important role it plays in contributing to the understanding of college students and their perspectives on mental health help seeking behaviors is crucial in expanding its applicability. Literature documents that an individual's perception of peers' attitudes has an important impact on behavior (Perkins, 2003). Increased levels of understanding about how misperception of social norms impacts the mental health and wellness behaviors of college students' are important advancements in positively impacting mental health among this population can be initiated.

Respondents in the current study indicated that they believed themselves to be more psychologically open or more willing to admit to psychological problems and seek treatment than their peers would be. The responses of participants indicate that the actual social norms regarding psychological openness, for the sample in the current study, are higher than what participants perceive them to be indicating that misperceptions among college students exist in terms of their peers' attitudes toward psychological openness. The knowledge that misperceptions do exist in college populations concerning mental health and mental health help seeking provide a foundation for future research and encourage further investigation of the interaction between social norms and college mental health and wellness.

### **Research Question 1b**

*Research Question 1b:* Are there statistically significant mean differences among college students' attitudes and perceptions of their peers' toward help seeking behavior (as measured by subscale help-seeking propensity on the Inventory of Attitudes Toward Seeking Mental Health Services)?

A one-way repeated measures ANOVA was utilized for data analysis. The sphericity assumption states that there are equal variances of the differences for all pairs of repeated measures. Since the dependent variable in the current study has two levels the test of sphericity is not applicable to this research design as the sphericity assumption by definition is always met for designs with only two levels of a repeated measures factor. Therefore, it is not necessary to conduct a Mauchly test on the data in the current study and as this assumption was met. Wilks' Lambda test statistic compares differences in



attitudes toward help seeking and perception of peers' attitudes toward help seeking in regards to help-seeking propensity. In looking at mean scores for the factor help-seeking propensity on the Inventory of Attitudes Toward Seeking Mental Health Services (IATSMHS), results revealed that there are statistically significant mean differences on the two conditions of help seeking behaviors regarding the help-seeking propensity factor. Wilks' Lambda statistical test was used to identify mean differences among condition 1 and condition 2; Wilks' Lambda = 0.643. The multivariate test statistic, F value, is  $F(1,195) = 108.293$ ,  $p = .000$  measured at  $p < .05$  level of significance. This indicates that there was a statistically significant difference in reporting among college students' regarding attitudes toward help seeking of self and their perception of their peers' attitudes toward help seeking in respect to help-seeking propensity. The descriptive means of attitudes toward help seeking (21.85) was significantly higher than perception of peers' attitudes toward help seeking (16.67) in regards to help-seeking propensity indicating that respondents perceived themselves to be more willing and able to seek professional psychological help or mental health services than their peers.

The data revealed that students in this sample perceived themselves to be more willing than their peers to seek help for psychological problems. This is noteworthy because it demonstrates a level of willingness in respondents to seek mental health services. However, we know that many college students who have psychological problems do not seek mental health services (Gallagher, 2010) indicating that there are barriers to college students engaging in mental health treatment. The revelation of differences in attitudes for self and perception of peer attitudes in the data, in this sample,

introduces the possibility of perceived attitudes of peers' regarding help-seeking propensity playing a role in college students not seeking mental health services. This serves to advance the level of understanding about factors that influence college students' attitudes and behaviors about mental health and mental health services.

Responses to statements on the Inventory of Attitudes Toward Seeking Mental Health Services included: 'If I believed I were having a mental breakdown, my first inclination would be to get professional attention,' 'I would want to get professional help if I were worried or upset for long period of time,' and 'If I were experiencing a serious psychological problem at this point in my life, I would be confident that I could find relief in psychotherapy;' help-seeking propensity of participants and their perception of their peers' help-seeking propensity was assessed. An individual's attitudes towards help-seeking propensity have a role in contributing to individual's overall attitude toward mental health services (Mackenzie, 2004). The data in the current study shows that there are differences in the self-attitudes and perception of peer attitudes for help-seeking propensity indicating that college students have misperceptions regarding their peers' attitudes toward this factor. This provides good insight regarding college student perceptions regarding factors that contribute to overall attitudes toward mental health services and serves to advance understanding about the barriers that exist toward individuals seeking mental health services.

Mental health service providers understand that in order to encourage individuals to receive mental health services, they must break down barriers and obstacles that promote avoidance to mental health help seeking (Vogel et al., 2007a). With increased

understanding about factors that create obstacles to college students' engaging in mental health help seeking researchers can gain important insight about how to more effectively serve this population.

Social influence plays a fundamental role in the way that barriers to counseling are shaped (Corrigan, 2004; Vogel et al., 2008). The data indicated that college students in this sample felt that their peers would not feel as favorably as they did about seeking mental health services. With that being said, there is indication that social norms may present an obstacle and play an important role in help-seeking propensity in college students. This suggests that social norms theory is a valuable framework for understanding the role that peers play in influencing college student participation in mental health services. Use of social norms to provide understanding about the impact that perception of peers' attitudes have on factors that contribute to mental health help seeking may provide important insights for understanding college students approach toward mental health and mental health help seeking.

### **Research Question 1c**

*Research Question 1c:* Are there statistically significant mean differences among college students' attitudes and perception of their peers' toward help seeking behavior (as measured by subscale indifference to stigma on the Inventory of Attitudes Toward Seeking Mental Health Services)?

A one-way repeated measures ANOVA was utilized for data analysis. The sphericity assumption states that there are equal variances of the differences for all pairs of repeated measures. Since the dependent variable in the current study has two levels the test of

sphericity is not applicable to this research design as the sphericity assumption by definition is always met for designs with only two levels of a repeated measures factor. Therefore, it is not necessary to conduct a Mauchly test on the data in the current study and as this assumption was met. Wilks' Lambda test statistic compares differences in attitudes toward help seeking and perception of peers' attitudes toward help seeking in regards to indifference to stigma. In looking at mean scores for the factor help-seeking propensity on the Inventory of Attitudes Toward Seeking Mental Health Services (IATSMHS), results revealed that there are statistically significant mean differences on the two conditions of help seeking behaviors regarding the indifference to stigma factor. Wilks' Lambda statistical test was used to identify mean differences among condition 1 and condition 2; Wilks' Lambda = 0.461. The multivariate test statistic, F value, is  $F(1,197) = 230.140$ ,  $p = .000$  measured at  $p < .05$  level of significance. This indicates that there was a statistically significant difference in reporting among college students' regarding attitudes toward help seeking of self and their perception of their peers' attitudes toward help seeking in respect to indifference to stigma. The descriptive means of attitudes toward help seeking (19.85) was significantly higher than perception of peers' attitudes toward help seeking (11.29) in regards to indifference to stigma indicating that individuals perceive themselves to be more indifferent in the extent to which they are concerned about important individuals in their lives finding out about them having psychological problems or that they are seeking mental health services.

Stigma is a well-researched topic in mental health. Often stigma associated with mental health services is perceived as undesirable or socially unacceptable (Vogel et al.,

2006) contributing to individual's lack of motivation to seek treatment for psychological distress (Corrigan, 2004). It is interesting to note that respondents felt that their peers would be more impacted by stigma than they would be. This may be attributed to an individual's desire to answer in a favorable way regarding their approach to mental health services and may in some way their denial that social stigma has an impact on their approach to personal wellness. The data provided by the current sample presents some interesting insight into the way that individual's perceive themselves to be impacted by stigma and provides an interesting perspective on the way that stigma effects the attitudes of individuals regarding mental health.

Mackenzie (2004) specifically pointed to the role that important individuals play in the decision to seek mental health treatment in defining the indifference to stigma factor. Through responses to statements on the Inventory of Attitudes Toward Seeking Mental Health Services that included: 'Having been mentally ill carries with it a burden of shame,' 'I would be embarrassed if my neighbor saw me going into the office of a professional who deals with psychological problems,' and 'Important people in my life would think less of me if they were to find out that I was experiencing psychological problems;' indifference to stigma of participants and their perception of their peers' indifference to stigma was assessed. An individual's attitudes towards indifference to stigma have a role in contributing to individual's overall attitude toward mental health services (Mackenzie, 2004). The data in the current study shows that there are differences in the self-attitudes and perception of peer attitudes for indifference to stigma indicating that college students acknowledge that stigma does have an impact on mental

health services, but believe that they are less affected by stigma than their peer group would be. This provides good insight regarding college student perceptions regarding factors that contribute to overall attitudes toward mental health services and serves to advance understanding about the way that social stigma impacts individual attitudes toward seeking mental health services.

Data reveals that college students' believed that stigma would play less of a role in their decision to seek mental health treatment than it would in their perception of their peers' attitudes toward help seeking. The literature points to the role that stigma has in establishing social norms, believing that it has a direct relationship on one's willingness to seek mental health services (Vogel, 2007a), however evaluating the perception of the impact of stigma on individual and the perception of the impact that stigma has on peers' is an interesting way to consider stigma. Investigation of an individual's perception of the role that stigma plays in seeking mental health services, provides researchers with insight into the way that stigma affects help seeking from a different perspective. This merits more in-depth investigation as understanding the interaction of social norms, perception, and stigma can serve to advance understanding of how to encourage individuals to seek mental health services and engage in health promoting behaviors.

### **Research Question 2**

*Research Question 2:* Are there statistically significant mean differences among male and female college students' attitudes and perception of their peers' attitudes toward help seeking behavior (as measured by total scores on the Inventory of Attitudes Toward Seeking Mental Health Services)?

A two-way repeated measures ANOVA was utilized for data analysis. Box's M Test of Equality of Covariance was used to test the covariance assumptions of the ANOVA as ANOVA assumes that the covariance matrix is similar for each response variable. Box's M tests this assumption. The p-value is .005; less than 0.001 (small value of .000), so there is no significance. The assumption is satisfied. That is the total score matrixes are equal for self-attitudes and perception of peer attitudes across gender for total score on the IASMHS. The sphericity assumption states that there are equal variances of the differences for all pairs of repeated measures. Since the dependent variable in the current study has two levels the test of sphericity is not applicable to this research design as the sphericity assumption by definition is always met for designs with only two levels of a repeated measures factor. Therefore, it is not necessary to conduct a Mauchly test on the data in the current study and as this assumption was met. Wilks' Lambda test statistic compares differences in male and female college students' attitudes toward help seeking and perception of peers' attitudes toward help seeking. Mean scores on the Inventory of Attitudes Toward Seeking Mental Health Services (IATSMHS), results revealed that there are statistically significant mean differences in mean attitudes in comparison with perception of peer attitudes. Wilks' Lambda statistical test was used to identify mean differences among attitudes and perception of peer attitudes; Wilks'  $\alpha = 0.718$ . The multivariate test statistic, F value, is  $F(1,189) = 74.174$ ,  $p = .000$  measured at  $p < .05$  level of significance. This indicates that there was a statistically significant difference in means regarding college students' reporting college students' attitudes toward help seeking of self and their perception of their peers' attitudes. This difference

in response when reporting about self attitudes and perception of others demonstrates that college students perceive their peers attitudes to be different than their own attitudes toward help seeking.

Mean scores on the Inventory of Attitudes Toward Seeking Mental Health Services (IATSMHS), revealed that there are statistically significant mean differences in mean attitudes in male and female college students regarding comparison with perception of peer attitudes. Wilks' Lambda statistical test was used to identify mean differences among male and female college students and attitudes and perception of peer attitudes; Wilks' Lambda = 0.941. The multivariate test statistic, F value, is  $F(1,189) = 11.803$ ,  $p = .000$  measured at  $p < .05$  level of significance. This indicates that there was a statistically significant difference in means regarding male and female college students' reporting attitudes toward help seeking of self and their perception of their peers' attitudes. This difference in response when reporting about self attitudes and perception of peers demonstrates that college students perceive their peers attitudes to be different than their own attitudes toward help seeking. The results of the study revealed the presence of a difference in how male and female respondents reported their attitudes and the perception of their peer attitudes.

Descriptive statistics were found for the mean scores regarding the total score among male and female college students on conditions 1 and 2 on the Inventory of Attitudes Toward Seeking Mental Health Services (IASMHS) where condition 1 indicates the college students' responses to the survey questions regarding their own attitudes toward help seeking behavior while condition 2 refers college students'



perception of their peers' attitudes toward help seeking behavior. Based on the results of the statistical analysis the mean for condition 1 in regard to females is 61.34 and the mean for condition 2 is 37.82. The results of the statistical analysis show that in regards to male college students the mean for condition 1 is 56.29 and the mean for condition 2 is 46.18. The differences are seen within the repeated measure of condition 1 and 2 with the mean for condition 1 being higher for both males and females. Results reveal that females had a higher mean score on condition 1 while males had a higher mean score on condition 2. The descriptive statistics reveal mean attitudes of help seeking among females and males was higher when reporting self attitudes and lower when reporting perception of peer attitudes toward help seeking. This indicates that respondents believe that they have a more favorable attitude toward help seeking than how they perceive their peers' attitudes toward help seeking.

Various researchers have discussed the impact of gender on help seeking attitudes and behaviors. Gender has been found to play a role in the attitudes toward help seeking with research showing that women have more positive attitudes than men regarding mental health services (Fischer & Farina, 1995). It is interesting that data from the current study shows that although women were seen as having a more favorable attitude toward mental health help seeking when reporting on self, women reported their perception of peer attitudes toward help seeking to be less favorable than men did. While this information does support differences in attitude towards mental health services and perception of peer attitudes toward of mental health exist, it reveals that in this sample, gender cannot predict perception.

While researchers stated that gender is seen as a predictive factor in seeking mental health services (Vogel et al., 2006) the literature also asserts that the relationship between gender and help seeking attitudes or intentions is not always straightforward (Moller-Leimkuhler, 2002; Vogel et al., 2005). The data for this sample is representative of the aforementioned research assertions. Hence, if gender does predict behavior, but does not predict attitude; investigation of the interaction between attitudes toward mental health help seeking and mental health help seeking behavior with regard to gender could provide valuable insight.

### **Research Question 2a**

*Research Question 2a:* Are there statistically significant mean differences among male and female college students' attitudes and perception of peers' attitudes toward help seeking behavior (as measured by subscale psychological openness on the Inventory of Attitudes Toward Seeking Mental Health Services)?

A two-way repeated measures ANOVA was utilized for data analysis. Box's M Test of Equality of Covariance was used to test the covariance assumptions of the ANOVA as ANOVA assumes that the covariance matrix is similar for each response variable. Box's M tests this assumption. The p-value is .032; less than 0.001 (small value of .000), so there is no significance. The assumption is satisfied. That is the covariance matrixes are equal for the self-attitudes and perception of peer attitudes across gender for the psychological openness factor. The sphericity assumption states that there are equal variances of the differences for all pairs of repeated measures. Since the dependent variable in the current study has two levels the test of sphericity is not applicable to this

research design as the sphericity assumption by definition is always met for designs with only two levels of a repeated measures factor. Therefore, it is not necessary to conduct a Mauchly test on the data in the current study and as this assumption was met. Wilks' Lambda test statistic compares differences in male and female college students' attitudes toward help seeking and perception of peers' attitudes toward help seeking in regards to psychological openness. In looking at mean scores on the Inventory of Attitudes Toward Seeking Mental Health Services (IATSMHS), results revealed that there are statistically significant mean differences in mean attitudes in comparison with perception of peer attitudes concerning psychological openness. Wilks' Lambda statistical test was used to identify mean differences among attitudes and perception of peer attitudes; Wilks'  $\alpha = 0.756$ . The multivariate test statistic, F value, is  $F(1,193) = 62.275$ ,  $p = .000$  measured at  $p < .05$  level of significance. This indicates that there was a statistically significant difference in means regarding college students' reporting college students' attitudes toward help seeking of self and their perception of their peers' attitudes in regards to psychological openness. This difference in response when reporting about self attitudes and perception of others demonstrates that college students perceive their peers attitudes to be different than their own attitudes toward help seeking regarding psychological openness. This means that college students perceived themselves to be more open to acknowledging psychological problems and more open to the possibility of seeking help for psychological issues than their peers.

Mean scores on the Inventory of Attitudes Toward Seeking Mental Health Services (IATSMHS), results revealed that there are statistically significant mean

differences in mean attitudes in male and female college students regarding comparison with perception of peer attitudes concerning psychological openness. Wilks' Lambda statistical test was used to identify mean differences among male and female college students and attitudes and perception of peer attitudes; Wilks'  $\alpha = 0.925$ . The multivariate test statistic, F value, is  $F_{(1,193)} = 15.550$ ,  $p = .000$  measured at  $p < .05$  level of significance. This indicates that there was a statistically significant difference in means regarding male and female college students' reporting attitudes toward help seeking of self and their perception of their peers' attitudes. This difference in response when reporting about self attitudes and perception of peers demonstrates that college students perceive their peers attitudes to be different than their own attitudes toward help seeking in regards to psychological openness. The results of the study revealed the presence of a difference in how male and female respondents reported their attitudes and the perception of their peer attitudes.

Descriptive statistics were found for the mean scores regarding the total score among male and female college students on conditions 1 and 2 on the Inventory of Attitudes Toward Seeking Mental Health Services (IASMHS) where condition 1 indicates the college students' responses to the survey questions regarding their own attitudes toward help seeking behavior while condition 2 refers college students' perception of their peers' attitudes toward help seeking behavior. Based on the results of the statistical analysis the mean for condition 1 in regard to females is 19.34 and the mean for condition 2 is 10.86. The results of the statistical analysis show that in regards to male college students the mean for condition 1 is 15.66 and the mean for condition 2 is

12.83. The differences are seen within the repeated measure of condition 1 and 2 with the mean for condition 1 being higher for both males and females. Results reveal that females had a higher mean score on condition 1 while males had a higher mean score on condition 2. The descriptive statistics reveal mean attitudes of help seeking among females and males was higher when reporting self attitudes and lower when reporting perception of peer attitudes toward help seeking. This indicates that respondents believe that they have a more favorable attitude toward help seeking than how they perceive their peers' attitudes toward help seeking. This indicates the presence of misperceptions about social norms and psychological openness with regard to gender. The data reveals that pluralistic ignorance is present across gender, but plays more of a role with female respondents. Female respondents perceived their peers' attitudes toward psychological openness to be less favorable than male respondents did. This indicates that social norms impact the perception of males and females differently. It is important to note the relationships between gender and social norms and gender and mental health help seeking in order to use social norms theory as a framework for investigating mental health help seeking.

### **Research Question 2b**

*Research Question 2b:* Are there statistically significant mean differences among male and female college students' attitudes and perception of peers' attitudes toward help seeking behavior (as measured by subscale help-seeking propensity on the Inventory of Attitudes Toward Seeking Mental Health Services)?

A two-way repeated measures ANOVA was utilized for data analysis. Box's M Test of Equality of Covariance was used to test the covariance assumptions of the ANOVA as ANOVA assumes that the covariance matrix is similar for each response variable. Box's M tests this assumption. The p-value is .021; less than 0.001 (small value of .000), so there is no significance. The assumption is satisfied. That is the covariance matrixes are equal for the self-attitudes and perception of peer attitudes across gender for the help-seeking propensity factor. The sphericity assumption states that there are equal variances of the differences for all pairs of repeated measures. Since the dependent variable in the current study has two levels the test of sphericity is not applicable to this research design as the sphericity assumption by definition is always met for designs with only two levels of a repeated measures factor. Therefore, it is not necessary to conduct a Mauchly test on the data in the current study and as this assumption was met. Wilks' Lambda test statistic compares differences in male and female college students' attitudes toward help seeking and perception of peers' attitudes toward help seeking in regards to help-seeking propensity. In looking at mean scores on the Inventory of Attitudes Toward Seeking Mental Health Services (IATSMHS), results revealed that there are statistically significant mean differences in mean attitudes in comparison with perception of peer attitudes concerning help-seeking propensity. Wilks' Lambda statistical test was used to identify mean differences among attitudes and perception of peer attitudes; Wilks' Lambda = 0.857 . The multivariate test statistic, F value, is  $F(1,194) = 32.333$ ,  $p = .000$  measured at  $p < .05$  level of significance. This indicates that there was a statistically significant difference in means regarding college students' reporting college students'

attitudes toward help seeking of self and their perception of their peers' attitudes in regards to help seeking propensity. This difference in response when reporting about self attitudes and perception of others demonstrates that college students perceive their peers attitudes to be different than their own attitudes toward help seeking regarding help seeking propensity. Thus, college students perceived themselves to be more able or willing to seek mental health services than their peers.

Mean scores on the Inventory of Attitudes Toward Seeking Mental Health Services (IATSMHS), revealed that there are statistically significant mean differences in mean attitudes in male and female college students regarding comparison with perception of peer attitudes concerning psychological openness. Wilks' Lambda statistical test was used to identify mean differences among male and female college students and attitudes and perception of peer attitudes; Wilks' Lambda = 0.961. The multivariate test statistic, F value, is  $F(1,194) = 7.791$ ,  $p = .000$  measured at  $p < .05$  level of significance. This indicates that there was a statistically significant difference in means regarding male and female college students' reporting attitudes toward help seeking of self and their perception of their peers' attitudes. This difference in response when reporting about self attitudes and perception of peers demonstrates that college students perceive their peers attitudes to be different than their own attitudes toward help seeking in regards to help seeking propensity. The results of the study revealed the presence of a difference in how male and female respondents reported their attitudes and the perception of their peer attitudes.

Descriptive statistics were found for the mean scores regarding the total score among male and female college students on conditions 1 and 2 on the Inventory of Attitudes Toward Seeking Mental Health Services (IASMHS) where condition 1 indicates the college students' responses to the survey questions regarding their own attitudes toward help seeking behavior while condition 2 refers college students' perception of their peers' attitudes toward help seeking behavior. Based on the results of the statistical analysis the mean for condition 1 in regard to females is 21.85 and the mean for condition 2 is 16.09. The results of the statistical analysis show that in regards to male college students the mean for condition 1 is 21.83 and the mean for condition 2 is 19.87. The differences are seen within the repeated measure of condition 1 and 2 with the mean for condition 1 being higher for both males and females. Results reveal that females had a higher mean score on condition 1 while males had a higher mean score on condition 2.

The descriptive statistics reveal mean attitudes of help seeking among females and males were higher when reporting self-attitudes and lower when reporting perception of peer help-seeking propensity. This indicates that male and female respondents believe that they have a more favorable attitude toward help seeking than how they perceive their peers' attitudes toward help seeking in terms of their willingness to seek mental health services. Mean scores for male and female respondents regarding self-attitudes was almost equal indicating that gender did not impact responses about the help-seeking propensity factor. However Fischer & Turner, (1970) reported that females repeatedly espouse more positive attitudes toward professional help seeking. Males reported their



peers to have more willingness to seek mental health services for psychological problems than females did. While females actually seek mental health services much more frequently than their male counterparts (Fischer & Farina, 1995) females believe that other women have a less favorable attitude toward mental health help seeking. This could be attributed to the impact that stigma has with regard to gender. Evaluation of specific factors that contribute to the perception of gender barriers toward help seeking promotes understanding of help seeking behaviors.

### **Research Question 2c**

*Research Question 2c:* Are there statistically significant mean differences among male and female college students' attitudes and perception of peers' attitudes toward help seeking behavior (as measured by subscale indifference to stigma on the Inventory of Attitudes Toward Seeking Mental Health Services)?

A two-way repeated measures ANOVA was utilized for data analysis. Box's M Test of Equality of Covariance was used to test the covariance assumptions of the ANOVA as ANOVA assumes that the covariance matrix is similar for each response variable. Box's M tests this assumption. The p-value is .021; less than 0.001 (small value of .000), so there is no significance. The assumption is satisfied. That is the covariance matrixes are equal for the self-attitudes and perception of peer attitudes across gender for the indifference to stigma factor. The sphericity assumption states that there are equal variances of the differences for all pairs of repeated measures. Since the dependent variable in the current study has two levels the test of sphericity is not applicable to this research design as the sphericity assumption by definition is always met for designs with

only two levels of a repeated measures factor. Therefore, it is not necessary to conduct a Mauchly test on the data in the current study and as this assumption was met. Wilks' Lambda test statistic compares differences in male and female college students' attitudes toward help seeking and perception of peers' attitudes toward help seeking in regards to indifference to stigma. In looking at mean scores on the Inventory of Attitudes Toward Seeking Mental Health Services (IATSMHS), results revealed that there are statistically significant mean differences in mean attitudes in comparison with perception of peer attitudes concerning indifference to stigma. Wilks' Lambda statistical test was used to identify mean differences among attitudes and perception of peer attitudes; Wilks' Lambda = 0.712 . The multivariate test statistic, F value, is  $F(1,196) = 79.122$ ,  $p = .000$  measured at  $p < .05$  level of significance. This indicates that there was a statistically significant difference in means regarding college students' reporting college students' attitudes toward help seeking of self and their perception of their peers' attitudes in regards to help indifference to stigma. This difference in response when reporting about self attitudes and perception of others demonstrates that college students perceive their peers attitudes to be different than their own attitudes toward help seeking regarding indifference to stigma. This means that college students perceived themselves to be more indifferent to significant people in their life knowing that they are seeking mental health services than their peers.

In looking at mean scores on the Inventory of Attitudes Toward Seeking Mental Health Services (IATSMHS), results revealed that there are statistically significant mean differences in mean attitudes in male and female college students regarding comparison

with perception of peer attitudes concerning indifference to stigma. Wilks' Lambda statistical test was used to identify mean differences among male and female college students and attitudes and perception of peer attitudes; Wilks' Lambda = 0.960. The multivariate test statistic, F value, is  $F(1,196) = 8.222$ ,  $p = .000$  measured at  $p < .05$  level of significance. This indicates that there was a statistically significant difference in means regarding male and female college students' reporting attitudes toward help seeking of self and their perception of their peers' attitudes in regards to indifference to stigma. This difference in response when reporting about self attitudes and perception of peers demonstrates that college students perceive their peers attitudes to be different than their own attitudes toward help seeking concerning the indifference to stigma factor. The results of the study revealed the presence of a difference in how male and female respondents reported their attitudes and the perception of their peer attitudes.

Descriptive statistics were found for the mean scores regarding the total score among male and female college students on conditions 1 and 2 on the Inventory of Attitudes Toward Seeking Mental Health Services (IASMHS) where condition 1 indicates the college students' responses to the survey questions regarding their own attitudes toward help seeking behavior while condition 2 refers college students' perception of their peers' attitudes toward help seeking behavior. Based on the results of the statistical analysis the mean for condition 1 in regard to females is 20.12 and the mean for condition 2 is 10.90. The results of the statistical analysis show that in regards to male college students the mean for condition 1 is 18.31 and the mean for condition 2 is 13.59. The differences are seen within the repeated measure of condition 1 and 2 with

the mean for condition 1 being higher for both males and females. Results reveal that females had a higher mean score on condition 1 while males had a higher mean score on condition 2. The descriptive statistics reveal mean attitudes of help seeking among females and males was higher when reporting self attitudes and lower when reporting perception of peer attitudes toward indifference to stigma, however men did view their peers as being more indifferent than women did. This indicates that male and female respondents believe that they have more indifference to stigma in approaching their attitude toward help seeking than how they perceive their peers' indifference to stigma in approaching their attitudes toward help seeking.

Data shows that men reported less indifference to stigma than females when reporting about self-attitudes and reported less indifference to stigma in perception of peer attitudes than females did. Moller-Leimkuhler (2002) indicated the importance of gender roles on seeking mental health services, however this data indicates that men did not perceive gender roles in a way consistent with the literature. This points to the presence of misperceptions in evaluating this literature regarding gender roles, perception, and help seeking.

### **Demographic Variables**

Respondents were asked questions on the demographic survey about age, race, gender, year in school, employment status, and college major. There were no significant between group differences found except for on college major that was found to be significant on all scales. Participants were asked to indicate whether or not their major was a counseling related major or a non-counseling related major. Finding significance

with this demographic variable is not surprising as we would expect to see differences in attitudes and perception of peer attitudes in students in counseling related fields than those who were had non-counseling related majors.

The issue of race and mental health help seeking is a well-researched topic. The results do not coincide with the literature concerning race and mental health help seeking. African Americans are less inclined to employ the help of mental health professionals than Whites (Miranda & Cooper, 2004). Literature indicates that African Americans are typically less apt to participate in mental health help seeking and are more inclined to employ their social network as a means of support to help them to work toward improving and resolving psychological distress (Brown & Palenchar, 2004; Miranda & Cooper, 2004; Diala, Muntaner, Walrath, Nickerson, LaVeist, and Leaf 2000). The less favorable view of mental health help seeking found in the African American race may be attributed to cultural beliefs. The present study had limited numbers of African American participants which likely impacted the revelation of significant results as this topic is well documented and investigated in the literature.

The data reflected an impact in respect to college major. Those students who had majors in counseling related fields responded more favorably to the survey in respect to their own feelings about counseling and in respect to how they viewed their peers' attitudes towards counseling. This is not a surprising finding as counseling students would be expected to have more understanding of the benefits of counseling and would be expected to be more informed about the mental health field. However, with almost half of the students in the current study being employed, the impact of employment vs.

unemployment was not seen as significant in the current study. It would be interesting for future investigation to pursue the influence that employment has on mental health as it has an effect on college students' level of responsibility, but would be a positive effect on their financial pressure.

### **Limitations of the Study**

The limitations of this study include; the truthfulness of the respondents, the social desirability of responses, instrumentation, phrasing of the survey questions, reading level of the respondents, sampling, and the form of operationalizing variables. The limitations in this study are due to the use of a convenience sample and the demographics of the sample attained. Although the sampling strategy was adequate for the current study, a more extensive sampling of college students throughout the state or country would yield results that could be applicable to larger populations based on the composition of race and gender. As a result of the demographics of the respondents, the sample was not seen as representative of race and gender. While the results are representative of the sample used in the current study, results cannot be applied to a larger population as the sample did not represent the composition of the college student population or general population.

### **Implications for Future Research**

The results of the current study have shown that differences do exist in college students' attitudes toward help seeking and perception of peers' attitudes toward help seeking. This speaks to the applicability of social norms theory to investigation of college students and their approach toward seeking mental health services. Social norms

have been noted in the literature as a potential avoidance factor in college students seeking mental health services (Vogel et al., 2007b). Vogel et al. (2005) reported that people reported a greater intention to seek professional help when their support system accepted the action. With an increased understanding about the perception of college students on mental health help seeking, inaccurate norms that are driving behaviors can be eliminated in order to promote mental health and wellness among this population.

While the current body of literature concerning social norms theory speaks to the effectiveness of using social norms interventions with problematic social behaviors, there is not a lot of research on the use of social norms to investigate the attitudes and perceptions of individuals in order to gain important insight into how interventions can be more efficacious. Future research that investigates social norms that contribute to perception and attitudes is necessary in order to gain a more thorough understanding of the relationship between mental health and social norms. This will serve to increase the level of understanding about the specific impact of misperceptions on attitudes toward mental health help seeking.

### **Conclusions**

With the current climate of mental health issues on college campus it is important that mental health professionals take an effective approach toward providing meaningful services to college students. Social norms theory is provides a commonsense approach toward combatting problematic social issues among young people. Just as social norms theory has successfully been applied to risk taking behaviors, the theory can be expanded to be applied to mental health issues and other social behaviors. Through studies like the

present study, evidence has been provided to show the usefulness of social norms theory in navigating the issues facing young people.

It is important that the application of social norms theory continue to be expanded in application. There are many pervasive issues that are impacting the wellness and social development of young people. Through use of social norms theory to combat social issues, mental health, and comprehensive wellness in university settings university officials and counselors prevention efforts hold the promise of positively impacting the problem behavior of America's adolescents and young adults.

Berkowitz (2005) recommends steps to successful social norms applications that include: collecting data about actual norms, understanding the saliency of norms, determining the appropriate outlet for communicating accurate norms, ensuring proper exposure to normative messages, and evaluating the results of the intervention.

Johannessen (2003) recommends that key stakeholders are well-informed about the normative perspectives, approach, that consultants and other professionals implementing the approach are not intimidating by challenging beliefs about misperceptions or beliefs of the stakeholders, that the messages concerning accurate norms and misperceptions are palatable, and that messages are presented in a believable fashion. Implementing a successful intervention using the social norms approach necessitates fully understanding the perspectives of individuals in the population, understanding the importance of thoughtful and strategic planning and knowledge of the steps necessary to execute interventions with target populations.



Social norms intervention and prevention efforts begin with an understanding of the perspectives and attitudes of the population of interest. Researchers levels of understanding of the social barriers and avoidance of help seeking among college students has increased however there is lack of empirical evidence about the impact that campus policies, resources, and strategies have on attitudes toward help seeking (Hunt & Eisenberg, 2010). Increasing our understanding for student perspective on help seeking enables researchers and college personnel to develop outcome based programming to enhance students' participation in mental health services

The challenges and criticisms associated with the social norms approach usually follow unsuccessful intervention efforts. It is during this time that we can learn the most about how to restructure our efforts in order to develop efficacious treatment strategies. It is important for consultants, counselors, and intervention and prevention specialists to understand that unsuccessful social norms campaigns are a result of the way that the theory is applied to social issues and not a result of the ineptness of the theory and its ability to adequately navigate social problems (Berkowitz, 2003). Some typical challenges associated with unsuccessful social norms efforts include: inadequate exposure to the normative message, inappropriate strategy for application, misinformation about the saliency of norms and accurate norm data, difficulty with collection of data, and difficulty with interpretation of results (Berkowitz, 2002). It is important that we learn from failed efforts in order to move forward in correctly applying social norms theory and advancing and expanding use of the theory as it is a promising method for intervening in social problems with young people.

The efficacy of social norms theory use with college populations and problematic drinking patterns is a well-documented phenomenon in the literature. In recent years, social norms theory has been successfully applied to high school and middle school students to combat perceived norms associate with alcohol, drug use, and tobacco (Perkins, 2003; Berkowitz, 2004). The application of social norms theory to a broader spectrum of health issues is emerging in popularity as usefulness of the social norms theory in combating issues outside of drugs and alcohol becomes more apparent. Traditional intervention strategies focus on problematic behavior. Social norms theory aims to acknowledge the existence of healthy norms in order to reveal misperceptions associated with problem behaviors. With continued application of the theory and progressive application its usefulness will continue to be expanded.

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## Appendix A: Informed Consent

### Ohio University Consent Form

**Title of Research: The Influence of Social Norms on Attitudes Toward Help Seeking Behavior of College Undergraduates at a Major Midwestern University**

**Researcher:** Courtney Kerns

You are being asked to participate in dissertation research for Courtney Kerns a Doctoral Candidate in Counselor Education and Supervision and Ohio University in the United States. The following is a description of the research and any possible risks, in order that you make an informed decision about your participation in this study. This process is known as informed consent. This form also explains how your personal information will be used and protected. Once you have read this form and your questions about the study are answered, you will be asked to sign it. This will allow your participation in this study. You should receive a copy of this document to take with you.

### Explanation of Study

The purpose of this study is to examine college students' attitudes toward professional help seeking and their perception of their peers' attitudes toward help seeking. I will explore your perceptions of your individual attitudes toward seeking professional psychological help, your perception of your peers' attitudes toward professional help seeking and the impact that gender and socioeconomic status play in the decision to seeking psychological help. Your participation in this process should be 1 hour or less. Your responses may offer insights into the college student social norms surrounding the genre of mental health and mental health treatment for college students as mental health disorders and psychological distress is an increasing issue among college students. Your responses may also help to prompt future research about more effective mental health programming and interventions for college students. As such you may be asked about your age, nationality, attitudes toward help seeking, perception of peers' attitudes toward help seeking, and information about you, your parents, or your spouses occupation and educational history.

### Risks and Discomforts

Some questions in this research deal with topics of a highly personal nature as mental health issues are often private issues for many individuals. Please consider your level of comfort in answering these kinds of questions when deciding whether you wish to participate. If you become significantly distressed during

this process please contact Ohio University Counseling and Psychological Services at:

**Hudson Health Center, 3rd Floor  
2 Health Center Drive  
Athens, Ohio 45701**

**Ohio University CPS T: (740) 593-1616  
Ohio University CPS F: (740) 593-0091  
Ohio University CPS E: [Counseling.Services@ohio.edu](mailto:Counseling.Services@ohio.edu)**

Your participation in this research is completely voluntary and there is no effect on your grades or instruction regardless of whether you choose to participate or not participate.

### **Benefits**

Your responses serve to benefit cultural understanding of social norms regarding mental health services and attitudes toward mental health services. Your perceptions may also offer insights into mental treatment for college students and prompt future research and investigation of mental health issues that are occurring with increasing prevalence in the college student population.

**Please Note: There is no compensation or special treatment for your participation in this research.**

### **Confidentiality and Records**

I will not collect any identifying information about you during this process. This means I will not ask for your name, family of origin, ID numbers, or any other information that would connect you to any survey responses except for this consent form, which will be stored separately from the data.

Additionally, while every effort will be made to keep your study-related information confidential, there may be circumstances where this information must be shared with:

- \* Federal agencies, for example the Office of Human Research Protections, whose responsibility is to protect human subjects in research;
- \* Representatives of Ohio University (OU), including the Institutional Review Board, a committee that oversees the research at OU;

### Contact Information

If you have any questions regarding this study, please contact one of the following:

*Courtney Kerns*  
 369 Broadview Ave  
 Zanesville, Ohio 43701  
 (614) 402-2106  
[ck159801@ohio.edu](mailto:ck159801@ohio.edu)

*Dr. Mona Robinson*  
 McCracken Hall 321  
 Athens, Ohio 45701  
 1-740-593-4461  
[robinsoh@ohio.edu](mailto:robinsoh@ohio.edu)

If you have any questions regarding your rights as a research participant, please contact Jo Ellen Sherow, Director of Research Compliance, Ohio University, (740)593-0664. [sherow@ohio.edu](mailto:sherow@ohio.edu)

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By signing below, you are agreeing that:

- you have read this consent form (or it has been read to you) and have been given the opportunity to ask questions
- known risks to you have been explained to your satisfaction.
- you understand Ohio University has no policy or plan to pay for any injuries you might receive as a result of participating in this research protocol
- you are 18 years of age or older
- your participation in this research is given voluntarily
- you may change your mind and stop participation at any time without penalty or loss of any benefits to which you may otherwise be entitled.

Signature \_\_\_\_\_ Date \_\_\_\_\_

Printed Name \_\_\_\_\_

Version Date: [4/1/2012]

## Appendix B: Surveys

### Attitudes Toward Professional Psychological Help Seeking (Fischer & Farina, 1970)

Using the scale below, respond to the questions with the response that best represents your view of the following statements. Please respond to each item with a 0 – 3 and do not use 4 – 9 on these items.

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1. Although there are centers for people with emotional problems, I would not have much faith in them.
2. If a good friend asked my advice about an emotional problem, I might recommend that he or she see a counselor.
3. I would feel uneasy going to a psychologist because of what some people would think.
4. A person with a stronger character can get over mental conflicts by himself or herself, and would have little need for a psychologist.
5. There are times when I have felt completely lost and would have welcomed professional advice for a personal or emotional problem.
6. Considering the time and expense involved in psychotherapy, it would have a doubtful value for a person like me.
7. I would willingly confide intimate matters to an appropriate person if I thought it might help me or members of my family.
8. I would rather live with certain mental conflicts than go through the ordeal of getting psychological assistance.
9. Emotional difficulties, like many things, tend to work out by themselves.
10. There are certain problems which should not be discussed outside of one's immediate family.
11. A person with a serious emotional disturbance would probably feel most secure in a good mental hospital.
12. If I believed I was having a nervous breakdown, my first inclination would be to get professional attention.

13. Keeping one's mind on a job is a good solution for avoiding personal worries and concerns.
14. Having seen a psychologist is a blot on a person's life.
15. I would rather be advised by a close friend than by a psychologist, even for an emotional problem.
16. A person with an emotional problem is not likely to solve it alone; she or he is likely to solve it with professional help.
17. I resent a person, professionally trained or not, who wants to know about my personal difficulties.
18. I would want to get psychological attention if I was worried or upset for a long period of time.
19. The idea of talking about problems with a psychologist strikes me as a poor way to get rid of emotional conflicts.
20. Having been mentally ill carries with it a burden of shame.
21. There are experiences in life I would not discuss with anyone.
22. It is probably best not to know everything about oneself.
23. If I were experiencing a serious emotional crisis at this point in my life, I would be confident that I could find relief in psychotherapy.
24. There is something admirable in the attitude of a person who is willing to cope with his or her conflicts and fears without resorting to professional help.
25. At some future time, I might want to have psychological counseling.
26. A person should work out his or her own problems; getting psychological assistance would be a last resort.
27. Had I received treatment in a psychiatric hospital, I would not feel that it ought to be "covered up."
28. If I thought I needed psychological help, I would get it no matter who knew about it.

29. It is difficult for people to talk about personal affairs with highly educated people such a doctors teachers, and clergy.

Recognition of need items: 4, 5, 6, 9, 18, 24, 25, 26;

Stigma of tolerance items: 3, 14, 20, 27, 28;

Interpersonal openness items: 7, 10, 13, 17, 21, 22, 29

Confidence in mental health practitioner items: 1, 2, 8, 11, 12, 15, 16, 19, 23



**Attitudes Toward Professional Psychological Help Seeking  
(Fischer & Farina, 1970)**

Using the scale below, respond to the questions with the response that best represents what you believe to be your peers view of the following statements. Please respond to each item with a 0 – 3 and do not use 4 – 9 on these items.

---

1. Although there are centers for people with emotional problems, I would not have much faith in them.
2. If a good friend asked my advice about an emotional problem, I might recommend that he or she see a counselor.
3. I would feel uneasy going to a psychologist because of what some people would think.
4. A person with a stronger character can get over mental conflicts by himself or herself, and would have little need for a psychologist.
5. There are times when I have felt completely lost and would have welcomed professional advice for a personal or emotional problem.
6. Considering the time and expense involved in psychotherapy, it would have a doubtful value for a person like me.
7. I would willingly confide intimate matters to an appropriate person if I thought it might help me or members of my family.
8. I would rather live with certain mental conflicts than go through the ordeal of getting psychological assistance.
9. Emotional difficulties, like many things, tend to work out by themselves.
10. There are certain problems which should not be discussed outside of one's immediate family.
11. A person with a serious emotional disturbance would probably feel most secure in a good mental hospital.
12. If I believed I was having a nervous breakdown, my first inclination would be to get professional attention.

13. Keeping one's mind on a job is a good solution for avoiding personal worries and concerns.
14. Having seen a psychologist is a blot on a person's life.
15. I would rather be advised by a close friend than by a psychologist, even for an emotional problem.
16. A person with an emotional problem is not likely to solve it alone; she or he is likely to solve it with professional help.
17. I resent a person, professionally trained or not, who wants to know about my personal difficulties.
18. I would want to get psychological attention if I was worried or upset for a long period of time.
19. The idea of talking about problems with a psychologist strikes me as a poor way to get rid of emotional conflicts.
20. Having been mentally ill carries with it a burden of shame.
21. There are experiences in life I would not discuss with anyone.
22. It is probably best not to know everything about oneself.
23. If I were experiencing a serious emotional crisis at this point in my life, I would be confident that I could find relief in psychotherapy.
24. There is something admirable in the attitude of a person who is willing to cope with his or her conflicts and fears without resorting to professional help.
25. At some future time, I might want to have psychological counseling.
26. A person should work out his or her own problems; getting psychological assistance would be a last resort.
27. Had I received treatment in a psychiatric hospital, I would not feel that it ought to be "covered up."
28. If I thought I needed psychological help, I would get it no matter who knew about it.

29. It is difficult for people to talk about personal affairs with highly educated people such a doctors teachers, and clergy.

Recognition of need items: 4, 5, 6, 9, 18, 24, 25, 26;

Stigma of tolerance items: 3, 14, 20, 27, 28;

Interpersonal openness items: 7, 10, 13, 17, 21, 22, 29

Confidence in mental health practitioner items: 1, 2, 8, 11, 12, 15, 16, 19, 23

### Inventory of Attitudes Toward Seeking Mental Health Services

The term *professional* refers to individuals who have been trained to deal with mental health problems (Psychologists, psychiatrists, social workers, and family physicians). The term *psychological problems* refers to reasons one might have to visit a professional. Similar terms include mental health concerns, Emotional problems, mental health troubles, and personal difficulties.

For each item indicate whether you agree (0), somewhat disagree (1), are undecided (2), somewhat agree (3), or agree (4).

Disagree					Agree
0	1	2	3	4	

---

1. There are certain problems which should not be discussed outside of one's immediate family.
2. I would have a very good idea of what to do and who to talk to if I decided to seek professional help for psychological problems
3. I would not want my significant other (spouse, partner, etc.) to know if I were suffering from psychological problems
4. Keeping one's mind on a job is a good solution for avoiding personal worries and concerns.
5. If good friends asked my advice about a psychological problem, I might recommend that they see a professional.
6. Having been mentally ill carries with it a burden of shame.
7. It is probably best to not know everything about oneself
8. If I were experiencing a serious psychological problem at this point in my life, I would be confident I could find relief in psychotherapy
9. People should work out their own problems; getting professional help should be a last resort.
10. If I were to experience psychological problems, I could get professional help if I wanted to

11. Important people in my life would think less of me if they were to find out what I was experiencing
12. Psychological problems, like many things, tend to work out by themselves.
13. It would be relatively easy for me to find the time to see a professional for psychological problems
14. There are experiences in y life I would not discuss with anyone
15. I would want to get professional help if I were worried or upset for a long period of time.
16. I would be uncomfortable seeking professional help for psychological problems because people in my social or business circles might find out
17. Having been diagnosed with a mental disorder is a blot on a person's life
18. There is something admirable in the attitude of people who are willing to cope with their conflicts and fears without resorting to professional help
19. If I believed I was having a mental breakdown, my first inclination would be to get professional attention.
20. I would feel uneasy going to a professional because of what some people would think
21. People with strong character can get over psychological problems by themselves and would have little need for professional help
22. I would willingly confide intimate matters to an appropriate person if I thought it might help me or a member of my family
23. Had I received treatment for psychological problems, I would not feel that it ought to be "covered up"
24. I would be embarrassed if my neighbor saw me going into the office of a professional who deals with psychological problems

Note: No permission was required to use this scale.

### Inventory of Attitudes Toward Seeking Mental Health Services

The term *professional* refers to individuals who have been trained to deal with mental health problems (Psychologists, psychiatrists, social workers, and family physicians). The term *psychological problems* refers to reasons one might have to visit a professional. Similar terms include mental health concerns. Emotional problems, mental health troubles, and personal difficulties.

For each item indicate whether you agree (0), somewhat disagree (1), are undecided (2), somewhat agree (3), or agree (4).

Please answer this survey based on the perception that you believe that your peers have of the items. Answer these questions based on what you believe your peers attitudes toward mental health services and psychological problems might be.

Disagree				Agree
0	1	2	3	4

---

1. There are certain problems which should not be discussed outside of one's immediate family.
2. I would have a very good idea of what to do and who to talk to if I decided to seek professional help for psychological problems
3. I would not want my significant other (spouse, partner, etc.) to know if I were suffering from psychological problems
4. Keeping one's mind on a job is a good solution for avoiding personal worries and concerns.
5. If good friends asked my advice about a psychological problem, I might recommend that they see a professional.
6. Having been mentally ill carries with it a burden of shame.
7. It is probably best to not know everything about oneself
8. If I were experiencing a serious psychological problem at this point in my life, I would be confident I could find relief in psychotherapy
9. People should work out their own problems; getting professional help should be a last resort.

10. If I were to experience psychological problems, I could get professional help if I wanted to
11. Important people in my life would think less of me if they were to find out what I was experiencing
12. Psychological problems, like many things, tend to work out by themselves.
13. It would be relatively easy for me to find the time to see a professional for psychological problems
14. There are experiences in y life I would not discuss with anyone
15. I would want to get professional help if I were worried or upset for a long period of time.
16. I would be uncomfortable seeking professional help for psychological problems because people in my social or business circles might find out
17. Having been diagnosed with a mental disorder is a blot on a person's life
18. There is something admirable in the attitude of people who are willing to cope with their conflicts and fears without resorting to professional help
19. If I believed I was having a mental breakdown, my first inclination would be to get professional attention.
20. I would feel uneasy going to a professional because of what some people would think
21. People with strong character can get over psychological problems by themselves and would have little need for professional help
22. I would willingly confide intimate matters to an appropriate person if I thought it might help me or a member of my family
23. Had I received treatment for psychological problems, I would not feel that it ought to be "covered up"
24. I would be embarrassed if my neighbor saw me going into the office of a professional who deals with psychological problems

Note: No permission was required to use this scale

## Demographic Information

1. Gender
  - a. Male
  - b. Female
  
2. Year in College
  - a. Freshman
  - b. Sophomore
  - c. Junior
  - d. Senior
  - e. 5<sup>th</sup> Year Senior
  - f. Post Undergraduate Student
  
3. Race
  - a. African American
  - b. Asian
  - c. Non-White Hispanic or Latino
  - d. Native American
  - e. White
  - f. Other
  
4. Age
  - a. 17 or under
  - b. 18
  - c. 19
  - d. 20
  - e. 21
  - f. 22
  - g. 23 or over
  
5. Major
  - a. Counseling or Mental Health related profession
  - b. Non-counseling or Mental Health related profession
  
6. Employment status
  - a. Employed
  - b. Unemployed



### Appendix C: Debriefing Letter

Fall Semester, 2012-2013  
Courtney Kerns, Doctoral Candidate  
Ohio University  
Counseling and Higher Education

Dear Participants,

Thank you for agreeing to participate in my research. This study is in partial fulfillment of my doctoral requirements in Counselor Education. As mental health issues become an increasing problem among college students, this research focuses on college students' attitudes about mental health treatment and their perspectives on their peers' attitudes toward professional help seeking. From your responses important insights into college students viewpoints will be gained so that in the future mental health professionals may better understand the viewpoints of the college student perspective.

If you have any further questions following the completion of this class time or would like to request a copy of my research and subsequent writings please contact me via email at [ck159801@ohio.edu](mailto:ck159801@ohio.edu). I appreciate you sharing your outlook with me today.

Thank you for your time and effort,

Courtney Kerns

## **Appendix D: Debriefing Information**

Thank you for your participation in this study. Your responses are very important to research in prevention. The results of this study will be used to contribute to the body of literature on social norms theory and its usefulness with developing programming to encourage mental health and wellness on college campuses. If you have experienced significant stress throughout this process please inform Ohio University Counseling and Psychological Services at:

**Hudson Health Center, 3rd Floor  
2 Health Center Drive  
Athens, Ohio 45701**

**Ohio University CPS T: (740) 593-1616  
Ohio University CPS F: (740) 593-0091  
Ohio University CPS E: [Counseling.Services@ohio.edu](mailto:Counseling.Services@ohio.edu)**

so that follow up care can be initiated. Your help and participation in this process was greatly appreciated.

The information that you have provided will be used for my doctoral dissertation. If you have any further questions, comments, or would like to learn more about this research, please feel free to contact me at [ck159801@ohio.edu](mailto:ck159801@ohio.edu). Thank you to the students for participating in this study.

Sincerely,

Courtney Kerns

## **Appendix E: Script of Introduction and Information for Participants Regarding the Study**

**A nearly identical introduction is provided to all groups consisting of these elements:**

- Researcher: Hello, My name is Courtney Kerns. I am a third year doctoral student in Counselor Education and Supervision. My dissertation research investigates the attitudes of college students toward professional help seeking behavior and their perception of peer attitudes toward help seeing behavior. As part of my dissertation research I am asking you to complete a survey today.
- Researcher: Prior to completing the survey I ask that you review the informed consent form that I have given to each of you to ensure that you fully understand what you are being asked to do. Your participation in this study is completely voluntary. Your signature on the informed consent form indicates your willingness to participate in this study is indicates that you understand and agree to the elements covered in the informed consent.
- Researcher: The survey will ask questions about your attitudes toward help seeking and your perception of your peers' attitudes toward professional help seeking.
- Researcher: This is a summary of the steps you will take to participate in this research
  - Read the informed consent
  - Sign the informed consent if you choose to participate

- Give the signed informed consent form to the researcher for collection whether you sign it or not
- Read the cover letter
- Take the questionnaire out of the envelope
- Complete the questionnaire if you choose to participate
- Immediately put it back in the envelope and seal it for sending to the processing office. This is part of making sure your answers are confidential. None of us in this room will see your individual responses (aside from the researcher that will be unable to determine the identity of the respondent.)
- Researcher: Please be advised that hasty completion of the questionnaires does not allow you to leave class early with an excused reason. Not only will you be required to wait for your peers to finish their questionnaires, but your professor does plan to conduct class upon completion of this research. Please take your time to reflect on your answers and ensure that they represent your true thoughts and feelings.

**Special Instructions:**

The researcher will provide these special instructions:

- This is not a test with right or wrong answers. Please think of it as being questionnaire sent to your home or apartment and fill it out just like you would if it had been sent there.

- As soon as you have answered the last question, please be sure that you put the questionnaire immediately into the envelope, seal it, and wait for additional instructions.
- Please know that following the completion of the survey we will engage in a debriefing conversation allowing you to ask questions that may have arisen through your participation in the survey.

**Distribution:**

After distribution of the informed consent, the participants will be given time to consider the information contained in the document. After reading the informed consent form, each respondent is asked to sign the informed consent or decline to sign the informed consent. The researcher will collect the informed consent forms and at that time the consenting respondents will be given a packet consisting of the questionnaires inside a sealed envelope, and a cover letter, clipped to the front of the envelope. They are told they can start when they receive it.

**Retrieval:**

Questionnaires will be picked up from where each respondent is sitting.

**Debriefing:**

More information about the questionnaire and its purpose may be provided by the researcher. Appreciation is expressed once again to respondents. Whatever questions people have may be answered.

- Researcher: I would like to thank you for your willingness to participate in my dissertation research. I am truly grateful for your time, effort, and feedback.

Your responses will be used to enhance cultural understanding of social norms regarding mental health services and attitudes toward mental health services.

Your perceptions may also offer insights into mental health treatment for college students and prompt future research and investigation of mental health issues that are occurring with increasing prevalence in the college student population. At this time I would like to remind you that if you are experiencing significant stress as a result of your participation in the study, I would like you to refer back to your informed consent form to the information for Ohio University Counseling and Psychological Services on the 3<sup>rd</sup> floor of Hudson Hall on Health Center Drive.

Again, the contact information and address can be found on your informed consent form. As we conclude, I would welcome questions and comments from you before I direct your attention back to your professor. At this time you are free to voice any questions, concerns or requests for further information that you may have.

## Visual Display

**STEP 1:** Read the informed consent

\*\*\* If you agree to the terms of the informed consent please continue with the following steps, if you do not agree with the terms in the informed consent, please discontinue your participation after step 1 of this procedure.

**STEP 2:** Sign the informed consent and give it to the researcher for collection

**STEP 3:** Read the cover letter

**STEP 4:** Take the questionnaires out of the envelope

**STEP 5:** Complete the questionnaires

**STEP 6:** Immediately put the questionnaires back into the envelope

**STEP 7:** Seal the envelope

**STEP 7:** Wait for the researcher to collect the envelopes

## Appendix F: No Permission Required To Use Survey

### *Inventory of Attitudes Toward Seeking Mental Health Services (IASMHS)*

The term *professional* refers to individuals who have been trained to deal with mental health problems (e.g., psychologists, psychiatrists, social workers, and family physicians). The term *psychological problems* refers to reasons one might visit a professional. Similar terms include *mental health concerns*, *emotional problems*, *mental troubles*, and *personal difficulties*.

For each item, indicate whether you *disagree* (0), *somewhat disagree* (1), *am undecided* (2), *somewhat agree* (3), or *agree* (4):

	Disagree	Agree
1. There are certain problems which should not be discussed outside of one's immediate family. . . . .	[0	1 2 3 4]
2. I would have a very good idea of what to do and who to talk to if I decided to seek professional help for psychological problems. . . . .	[0	1 2 3 4]
3. I would not want my significant other (spouse, partner, etc.) to know if I were suffering from psychological problems. . . . .	[0	1 2 3 4]
4. Keeping one's mind on a job is a good solution for avoiding personal worries and concerns. . . . .	[0	1 2 3 4]
5. If good friends asked my advice about a psychological problem, I might recommend that they see a professional. . . . .	[0	1 2 3 4]
6. Having been mentally ill carries with it a burden of shame. . . . .	[0	1 2 3 4]
7. It is probably best not to know <i>everything</i> about oneself. . . . .	[0	1 2 3 4]
8. If I were experiencing a serious psychological problem at this point in my life, I would be confident that I could find relief in psychotherapy. . . . .	[0	1 2 3 4]
9. People should work out their own problems; getting professional help should be a last resort. . . . .	[0	1 2 3 4]
10. If I were to experience psychological problems, I could get professional help if I wanted to. . . . .	[0	1 2 3 4]
11. Important people in my life would think less of me if they were to find out that I was experiencing psychological problems. . . . .	[0	1 2 3 4]



12. Psychological problems, like many things, tend to work out by themselves..... [0 1 2 3 4]
13. It would be relatively easy for me to find the time to see a professional for psychological problems. .... [0 1 2 3 4]
14. There are experiences in my life I would not discuss with anyone..... [0 1 2 3 4]
15. I would want to get professional help if I were worried or upset for a long period of time. .... [0 1 2 3 4]
16. I would be uncomfortable seeking professional help for psychological problems because people in my social or business circles might find out about it. ... [0 1 2 3 4]
17. Having been diagnosed with a mental disorder is a blot on a person's life. .... [0 1 2 3 4]
18. There is something admirable in the attitude of people who are willing to cope with their conflicts and fears without resorting to professional help..... [0 1 2 3 4]
19. If I believed I were having a mental breakdown, my first inclination would be to get professional attention..... [0 1 2 3 4]
20. I would feel uneasy going to a professional because of what some people would think. .... [0 1 2 3 4]
21. People with strong characters can get over psychological problems by themselves and would have little need for professional help. .... [0 1 2 3 4]
22. I would willingly confide intimate matters to an appropriate person if I thought it might help me or a member of my family. .... [0 1 2 3 4]
23. Had I received treatment for psychological problems, I would not feel that it ought to be "covered up," ... [0 1 2 3 4]
24. I would be embarrassed if my neighbor saw me going into the office of a professional who deals with psychological problems.. .... [0 1 2 3 4]

Note. No permission is required to use this inventory.



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